

PRICE LIST 2025

PRODUCTS AND SERVICES CATALOG













Interactive version

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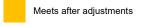


COMPARISON OF MEASURING AND RECORDING INSTRUMENTS

		Со		and da	ata	ا			s and	small		e meter dings	Le	Level meters and flow meters			OW	Wa qua	
		C8	Н3	Н7	M4016(/KDO)	H1	Н2	H40	H50	STELA	H11	S130	Q2 (/KDO)	M2001Q (Z)	H500	H520	H531	E2	M2001E
	Data memory [MB]	6	6	6	4	2	2	2	2	2			6	2				6	2
<u> </u>	Analogue recording channels	120	32	96	16	8	8	8	8	8			16	2				16	1
une	Binary recording channels	240	64	208	40	4	4	2	2	2			16					16	
thai	Analog inputs 4 (0) -20 mA		6*	6*	6	3	3	1	2	1			4	1		1	1	4	1
g G	Voltage inputs 0-2 V DC		2*	2*	2	2	2												
ī.	Voltage inputs for TSH27 (comp. ATM)														1	1	1		
oco	RS485 line for sensors (master)	4	2*	2*	1	1	1	1	1	1			2*	1	1		1	2*	1
Inputs and recording channels	RS485 line for master system (slave)		1	1									1			1		1	
s an	SDI-12 data line for sensors		1*	1*	1*			1	1	1									
puts	Pulse / binary inputs (OPTO, REED)	9	6*	6*	8	2	2	2*	2*	2*	2	2	4					4	
ੂ	Binary inputs 0/1					2	2				1				1		1		
	Connect:. S-clamps; C-connector; K-cable	S	S	S	S	S	S	С	С	K/S	K	K	S	S	S	S	S	S	S
	Mechanical relay 230 VAC / 5 A	5	2*	2*									2*	3				2*	3
ts st	Mechanical relay 24 VDC / 5 A		2	2	2								2					2	
Outputs	Electronic relays 12/24 V / 1 A		2*	2*									2*		1			2*	
ō	Current output 4-20 mA, active		2*	2*									2*	2*				2	2*
	OPTO sensor supply voltage output	1	1	1					1		1		1						
<u>e</u>	DV2 external I / O module connection																		
module	Out module connection MAV421, 422																		
Ĕ	In module connection AIM600, AIM615																		
0/1	Connecting the H520-B display module																		
(0	PID controller output																		
ons	Calculation of flow or rainfall from pulses																		
ncti	Calculation of flowed volumes from level																		
ī.	Calculation of flow volumes from velocity				1**								4**						
ran	Calibration of electrochemical probes																		
Program functions	Calibration of the ESKO12 sensor																		
<u> </u>	Self-diagnostics																		
	Display: G = graphic; A = alphanumeric		G	G	Α	G	G						G	Α	G	Α	G	G	Α
Ē	Keyboard (number of fingerboards)		8	8	21	1	1						8	3	3	3	3	8	3
io	Local RS232 communication (MOST)																		
Local control	Local USB communication (sw MOST4)																		
Po	Local NFC communication (mobile FC ap)																		
	Local BT5 communication (MOST4, FC)																		
	Data collection in the GPRS network																		
ဟ	Data collection in the NB-IoT network																		
ice	Data collection in LoRa or Sigfox network																		
ser	Automatic completion of missing data																		
er s	Visualization of data, graphs and tables																		
Server services	Remote parameterization - sw MOST																		
- 0,	Remote parameterization – sw MOST4																		
	Remote Cloud FM parameterization																		
	Internal battery power (num. of batteries)					1	1	2	2*	4*	1	1					1		
Power	Possibility of DC voltage supply, type [V]	24	12	12	12	12	12		5		12		12		24	12	5	12	12
Po	Possibility of power supply with 230 VAC																		
	Protection IP67 or higher * The stated value represents the maximum possible																		

^{*} The stated value represents the maximum possible number depending on the type of connection board used and the device configuration ** Applies to / KDO version only

The device meets the requirement





Fulfillment is being prepared

Does not meet the requirement

OVERVIEW OF OUTPUT SIGNALS AND SELECTED PARAMETERS OF SENSORS AND PROBES

		ر ہ	ıg range	ی م ک	Output signal		MODBUS RTU	U supply [V] (U optimal)	Rise time [s]
		iair ure ty	ırir	ıda ure tie	t si		١ž	lg iii	me
		The main measured quantity	Measuring	Secondary measured quantities	ndı	Щ		opt	e ti
		The qua	Me	Sec me qua	no	FINET	<u>M</u>	n n	Ris
	TSH22 (tensometer)	water level	05; 7; 10 mH ₂ O	water temperature	RS485			616 (12)	0,5
	TSH37 (tensometer)	water level	00,4m to 250mH ₂ O	water temperature	RS485			815 (12)	0,7
	LMP307/4-20 (tensometer)	water level	00,4111 to 250 mH ₂ O	water temperature	4-20 mA				0,7
	` '		=	-				832 (24)	
δ	TSH35 (tensometer)	water level	010 mH ₂ O	-	4-20 mA			832 (24)	0,5
osc	LMK809 (tensometer)	water level	04 m to 100 mH ₂ O	-	4-20 mA			932 (24)	0,7
ser	TSH28 (tensometer)	water level	010 m; 025 m	-	05 V DC			12	0,5
Level and flow sensors	US1200 – US4200 (ultr.)	water level	01,2 m to 4,2 m	air temperature	RS485			1024 (12)	
¥	SPA-5xx-4 (ultrasonic)	water level	0,153m; 0,3518m	-	4-20 mA			1136 (24)	
anc	VEGAPULS C11 (radar)	water level	08 m	-	4-20 mA			1235 (24)	
©	VEGAPULS C21,C23 (rad)	water level	015 m, 030 m	-	4-20 mA			1235 (24)	15
φ	WPP, WES-1xx (radar)	water level	0,223 m	-	4-20 mA			2236 (24)	120
_	PSH30 (float)	water level	030 m	air temperature	RS485			614 (12)	per.
	NLP-1XX, NWP-1xx (plo.)	level switch	-	-	contact relay			-	-
	KDO/S-K0, KDO/P-R0	flow rate	-6 m/s to +6 m/s	water temp., level	RS485			10-24 (12)	3
	PF500, PF200	flowed volume	06 l/min	-	contact relay	-	-	-	-
	PH485	pН	0,0013,00 pH	temp., Upot. [mV]	RS485			524 (12)	0,5
γo	ORP485	Redox potential	-2000+2000 mV	water temperature	RS485			524 (12)	0,5
sor	ISE485	potential ISE el.	-2000+2000 mV	water temperature	RS485			524 (12)	0,5
Water quality sensors	ESP11	pH	1,0013,00 pH	water temperature	RS485			1026 (12)	<1
ty S	ESR11	Redox potential	-1200+1200 mV	water temperature	RS485			1026 (12)	
iii Iii	ESK11	dissolved oxygen	0,0030,00 mg/l	water temperature	RS485			1026 (12)	
ъ.	ESV11	Conductivity	02000 μS/cm	water temperature	RS485			8-16 (12)	<1
ater	ESKO12, S423/C/OPT	dissolved oxygen	0,0020,00 mg/l	water temperature	RS485			12-26 (24)	
Š	ESZK11 (optical)	Clouding	010; 04000 NTU	water temperature	RS485			512 (12)	<1
	S461/TN, /LT (optical)	Clouding	010;100,4000 NTU	water temperature	RS485			1224 (24)	
	SR03, SR02	rainfall	0200 mm/h	water temperature	contact relay			1224 (24)	_
	RT03 heating regulator	rainfall	pulses-max 30p/min	tomp of heat sect	RS485			24-28 (27)	nor
			Pulses					. ,	
	RG-11	rain detector		rain intensity	contact relay			1015 (12)	
	RDH11	rainfall	it's raining/it's not r.	rain intensity	OK, RS485			1024 (12)	1
φ	Pt100-XP	Temperature	-50°C to +120°C	-	change R			z TEP06	-
Se	TEP1/X	Temperature	-50°C to +100°C	- C in musta fam Dt400	RS485			616 (12)	
npg	TEP06	conversion for Pt100	-50°C to +100°C	6 inputs for Pt100	RS485			616 (12)	2
aus	HFP01-05	heat flow	±2000 W / m ²	-	μ V/ W/ m^2			-	-
₽	SG002	solar radiation	01000 W / m ²	-	02 V DC			1115 (12)	2
Meteorological sensors and transducers	CMP3 – CMP11	solar radiation	02000 W / m ²	-	μ V/ W/ m^2			-	-
S	NR LITE2	solar radiation	±2000 W / m ²	-	μ V/ W/ m^2			-	-
usc	CNR4	solar radiation	2xpyrano+2xpyrgeo	Temperature	μ V/ W/ m ²			-	-
Se	TEP06/P	Convert µV / RS485	9 mV to 1,1V	2 temperature Pt100	RS485			616 (12)	2
ख	RVT80, RVT81	RH and air temp.	0100%,-40+60°C	-	RS485			614 (12)	<1
DG	RVT12, RVT12/RK5	RH and air temp.	0100%; -50+100°C	-	2x 01 V DC			3,3 (3,3)	<1
<u>ō</u>	RVT13, RVT13/RK5	RH and air temp.	0100%; -50+100°C	-	RS485			524 (12)	<1
teo	WS103, WS103-H	wind speed	0,6 to 60 m/s	Average / Gust	RS485			824 (12)	5
Μe	WD360, WD360-H	wind direction	0 to 359°	Average / Interval	RS485			824 (12)	5
	UA4310	speed and direction	075 m/s; 0359°	-	RS485			936 (24)	2
	VIRRIB	Volume soil moisture	550 %	-	0,25 mA			5,518 (12)	1
	CS650	Volume soil moisture	0100 %	Soil temp., permit.	SDI-12			618 (12)	3
	TMS11A, TM4	soil suction pressure	065 kPa, 050°C	Soil temp., ATM	RS485			614 (12)	0,5
	ATM10, ATM11	Atm. air pressure	300 1100 mbar	air temperature	RS485			616 (12)	0,5
	CYBLE		1100 l/puls, 075 Hz	-	OC (NPN)			-	-
	ELSTER		11000 l/puls, 75 Hz	alternatively M-Bus	OC (FET)			_	-
	VC-08 to VC-11		11 / pulse, max. 75 Hz	-	OC (NPN)			3,514 (5)	Per.
	ELM1	electrical energy		-	RS485			528 (12)	1
		olocalou ollorgy			- 1.0 100			J 20 (12)	

Digital sensor output

The communication protocol is being prepared

POSSIBILITIES OF CONNECTING SENSORS AND PROBES TO INDIVIDUAL MEASURING INSTRUMENTS

		aı	Contro nd da ollecti	ta	D	atalog teler			l sma ions	II	r	emot neter adinç	r	L		metei / met		d	Wa qua		Co	onver sen:	
		C8	H3, H7	M4016(/KDO)	H1	Н2	H40	H50	STELA		H11		S130	Q2 (/KDO)	M2001Q (Z)	H500	H520	H531	E2	M2001E	TEP06	TEP06/P	TM4
	TSH22		_	_		_	_	_	0)		_		0)		_	_	_	_	ш	_			
	TSH37, LMP307i/485																						
	TSH35, LMP307i/4-20																						
	LMK809																						
	TSH28																						
	US1200 – US4200																						
	SPA-5xx-4																						
	VEGAPULS WL 61																						
	WPP, WES-1xx																						
	PSH30																						
	NLP-1XX, NWP-1xx																						
	KDO/S-K0, KDO/P-R0																						
	PF500, PF200																						
	PH485																						
	ORP485																						
	ISE485																						
	ESP11																						
	ESR11																						
ومقرق طهواني ومادي	ESK11																						
; -	ESV11																						
	ESKO12, S423/C/OPT																						
	ESZK11																						
	S461/TN, /LT																						
	SR03, SR02																						
	RT03																						
	RG-11																						
	RDH11																						
	Pt100-XP																						
	TEP1/X																						
	TEP06, TEP06/P																						
	HFP01-05																						
	SG002																						
	CMP3 – CMP11																						
	NR LITE2																						
	CNR4																						
	RVT80, RVT81																						
	RVT12, RVT12/RK5																						
	RVT13, RVT13/RK5																						
	WS103, WS103-H																						
	WD360, WD360-H																						
	UA4310																						
	VIRRIB																						
	CS650																						
	TMS11A																						
	TM4																						
	ATM10, ATM11																						
	CYBLE																						
	ELSTER																						
	VC-08 to VC-11																						
	ELM1																						



MONITORING AND CONTROL TECHNOLOGY



C8 – process control unit on DIN rail	page 8	<u> </u>
H3, H7 - monitoring and control unit	page 10	
External modules for control units	page 13	000000

Display

Type Description

Price EUR without VAT

















Modular control unit with a large number of measuring analog and binary inputs and outputs designed to control technological processes in water supply. Four RS485 serial communication lines allow the connection of many different sensors under the MODBUS RTU and FINET protocols. The software supports flow measurement, control of pumps and blowers, including outages. C8 contains 4 integrated PID controllers and enables data hosting on the server via a built-in GSM / GPRS communication module, including remote parameterization of the device.

Typical applications: control of WWTP technology, control of water treatment plants and CS, WWTP and VDJ and many other applications not only in water supply and industry. Data acquisition and warning system when preset limits are exceeded

Analogue recording channels: 120 channels for archiving the measured quantity (flow, level, volume, temperature, pH, ORP, dissolved oxygen, conductivity, energy, speed, pulses, precipitation,...).

Binary recording channels: 240 binary channels. Each channel is configurable as a binary input or binary output. The input binary channel records the moment of switching on and off the input with a time resolution of 1 s (runs and faults, object security,...). Output binary channels allow to command relays based on logic functions with other binary channels (AND, NAND, OR, NOR, XOR).

Text channel - diary of events: texts and phone numbers of received and sent SMS, sending data to the server, faults of connected sensors, power failures, ...

Communication interface: four independent RS-485 buses for communication with the master system under FINET or MODBUS-RTU protocols, data collection from connected sensors, control of external modules, connection of an external display module, ...

USB mini: device parameterization, transfer of measured data

GSM / GPRS internal communication module: remote parameterization of the device. transmission of measured data to the server, sending of warning SMS

Analog inputs: in the basic version 6 current inputs 4 (0) -20 mA

Binary inputs: 9 0/24 VDC inputs in the basic version, easily expandable with external modules

Binary outputs: in the basic version 5 relays (switching contact 250 V AC or 24 V DC / 5 A) easily expandable with external modules by relay outputs 250 V AC / 5 A.

Supply voltage: 10 to 30 V DC (type 24 V DC), built-in backup rechargeable battery **Dimensions:** 114.5 x 90 x 99 mm, IP20

C8-BIC Basic controller assembly, 6x Al, 9x Bl, 5x BO, 4x RS485, internal GSM / GPRS module 1 247,-



Expansion modules for C8 unit

I/O modules for expanding the inputs and outputs of the C8 unit.

The expansion modules are connected to the basic C8-BIC assembly using a connector housed in a DIN rail, which contains the supply voltage for the module and the fast serial communication line. Connecting the module to the C8 base unit or replacing it is therefore very easy and fast and does not require any wire jumpers.

The expansion modules have a uniform width of 22.5 mm.

Up to 20 external input / output modules can be connected to the C8-BIC base unit. The following three expansion modules are currently available:

5	Expansion I / O module for C8 unit, 9x BI 0/24 VDC, 5x switching BO 250 V AC / 5A	278,-
0	Expansion I / O module to C8 unit, 18x BI 0/24 VDC	261,-
8	Exp. I/O module for C8. 4x switching BO 250 VAC / 8A. 4x switching BO 250 VAC / 5 A	276,-

C8-EB35

C8-EB60

C8-EB08

REMOTE METER READING

Cotto Productions COM

Optional accessories for the C8 control unit

Display modules

Graphic display modules for visualization of measured data and parameterization of the C8 unit. The display modules are connected to the C8 unit via an RS-485 serial line.

PANEL HMI 10

PANEL HMI 24

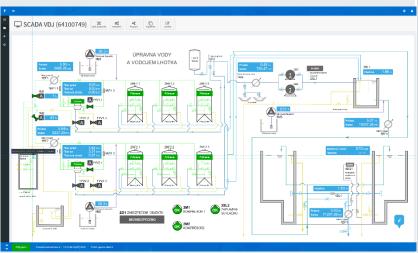
10 "touch screen with a fixed data visualization structure and complete parameterization. Price including SW work.

Touch screen with a diagonal of 24 "with configurable graphics, typically technological scheme of operation. The price does not include SW work.

1 479,-

Service offer

Creating a technology screen



The price for the design of one technological screen and the subsequent graphic design corresponding to the controlled or monitored technology depends on the complexity of the screen and the number of active elements. Usually, the price for creating a technological screen ranges in a wide range from 5 to 20 thousand CZK without VAT.

Technology screen

Design and creation of a single technological screen

On request

H3, H7 - MULTICHANNEL TELEMETRIC STATION, CONTROL UNIT



Display Type Description Price EUR without VAT



H3









Universal telemetry and control unit, parameterization via USB, GPRS or Wi-Fi, self-diagnostics, color touch screen, robust Al box, high IP67 protection.

Up to 96 measuring recording channels for sensors of level, flow, pressure, rainfall, pH, REDOX potential, diss. oxygen, turbidity, conductivity, ISE voltage, temperature, operating hours and many other variables; optional units of measure, one or two-point calibration of connected sensors, 64 measuring channels with calculation of total, daily, monthly and annual sum.

Flow measurement: 4 recording channels for measuring and calculating the flow in open profiles using preset consumption equations, archiving of daily flow volumes.

Up to 208 binary channels adjustable as Input / Output, recording of movements and faults of motors, pumps, etc., to selected channels can be set operating hours counter

1 text channel as an event log (SMS recording, data sessions to the server, faults, ...).

Control: Limit, time and logic relay control, 4xPID controller. Depending on the type of connection board, up to 4x relays (control of other relays in external modules DV2, DV3), up to 2x active current output 4-20 mA, (additional current outputs 4-20 mA using external MAV42x / DIN modules).

Communication interface:

USB mini: device parameterization, transfer of measured data in the field

RS-485-I: data acquisition from connected sensors under FINET and MODBUS RTU protocol.

RS-485-II: data collection from connected sensors, control of external modules, data transfer to the superior system under the MODBUS RTU protocol

SDI-12 (TA4): data acquisition from connected sensors and transducers.

•	modules	ard	3
Device type	Communic. modules	Terminal board	Housing

Configuration examples:

H3-G-TB2-B (1000, -+250, -+196, -=1446, -)

H3 unit, internal GSM communication module, TB2 connection board, power supply

- Communic. m	- Terminal boar	- Housing	from an external 12-24 V DC source, built-in Li-Pol battery, location in an Al box with 5 metal cable glands H7-G-TA5-A (1250,- + 250,- + 117,- + 129,- = 1 746,-) H7 unit, internal GSM communication module, TA5 connection board, power supply from a 12V battery, possibility of external battery charging from a 13.8V source, location in an ARIA cabinet with 5 cables. glands, without lock Base price:	
			Multichannel calibration and control unit, flow meter, 16 recording channels	1 000,-
			Multichannel calibration and control unit, flow meter, 96 recording channels	1 250,-
			Surcharges for communication module, terminal board and design:	
U			Without communication module - only USB mini (IP67)	0,-
G			Internal GSM module	+ 250,-
W			Internal Wi-Fi module	+ 250,-
E			Internal Ethernet module	+ 250,-
	TB1		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, Un= Pb batt., Uext. 14-28 V (solar), IP67	+ 175,-
	TB2		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, 2x 4-20 mA, Li-Pol batt., Un=2-28 VDC	+ 196,-
	TB3		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, 2x 4-20 mA, Li-Pol batt.,Un=230VAC, IP67	+ 213,-
	TA4		IN: 8x AIN, 6x BIN, SDI-12, 2x RS485; OUT: 2x rele, Un= Pb batt., Uext. 13,8 V	+ 117,-
	TA4E		IN: 8x AIN, 6x BIN, SDI-12, 2x RS485, 2x Pt100; OUT: 4x rele, Un=Pb b., Uext.13,8V	+ 196,-
	TA5		IN: 7x AIN (1x 010V), 8x BIN, 2x RS485; OUT: 2x rele, Un= Pb battery, Uext. 13,8V	+ 117,-
		В	Only with TBx connection plate, aluminum box 140x160x70 mm, 5x cable. gland	0,-
		Α	ARIA cabinet 300x200x170 mm equipped, IP66, 5x cable gland	+ 129,-
		AZ	Cabinet ARIA 300x200x170, IP66 equipped, lockable handle, 5x cable gland	+ 138,-
		AK	ARIA 300x200x170 cabinet, IP66, portable design with connectors, handle	+ 210,-
		AKZ	ARIA 300x200x170 cabinet, IP66, portable design with connectors, handle, lock	+ 221,-
		S	Enclosure SCH 400x300x200 mm, IP66, 2 loops, 5x cable gland	+ 144,-
		SZ	SCH 400x300x200 cabinet, IP66, 2 lockable handles, 5x cable gland	+ 163,-
		N	Stainless steel cabinet 470x320x230, IP66, 2 loops, 9x metal cable gland	+ 335,-
		NZ	Stainless steel cabinet 470x320x230, IP66, 2 lockable handles, 9x metal cable gland	+ 354,-
		Р	Design for panel mounting	0,-

0.-

129,-

144 -



Cabinet design

Al Box

Made of aluminum alloy, the device is suitable for indoor and outdoor fixed installation. The cabinet has a high IP67 protection, metal cable glands 2x M20 and 3x M16, a filter for balancing the atmospheric pressure inside the cabinet with the outdoor environment. Recommended installation of the cabinet using KRV-2 brackets, which also form the basic protection of the device.

Only with or. TBx plate, aluminum box 140x160x70 mm, 5x cable gland, IP67 В



ARIA32 cabinet

Universal plastic case suitable for indoor and outdoor environments (polyester reinforced with glass fibers). The portable version of the cabinet (-AK and -AKZ) has a handle, rubber feet and usually 4 connectors on the side for connecting sensors and external power supply.

The cabinet has IP66 protection, a handle or lockable closure, M20 and M16 cable glands, a filter for balancing the atmospheric pressure inside the cabinet with the outdoor environment. The cabinet is attached to the mast using two DSS-2 brackets (not included). Due to its size, the case is suitable for a 12V / 9Ah battery.

ARIA cabinet 300x200x170 mm, IP66, 5x cable gland

	•	
AZ	ARIA 300x200x170 cabinet, IP66, lockable handle, 5x cable gland	138,-
AK	ARIA 300x200x170 cabinet, IP66, portable design with connectors, handle, legs	210,-
AKZ	ARIA 300x200x170 cabinet, IP66, portable design with connectors, handle, lock	221,-



W **SCHNEIDER** cabinet

S

N

Universal plastic case suitable for indoor and outdoor environments (polyester reinforced with glass fibers).

The cabinet has IP66 protection, 2 loops or 2 lockable closures, M20 and M16 cable glands, a filter for balancing the atmospheric pressure inside the cabinet with the outdoor environment. The cabinet is attached to the mast using two DSS-2 brackets (not included). Due to its size, the cabinet is suitable for a battery up to 12 V / 45 Ah.

Enclosure SCH 400x300x200 mm, IP66, 2 loops, 3x, 5x or 9x cable gland

Stainless steel sehinet 470v220v220, IDSS 2 leans 0v metal sehle gland

_	3	,
SZ	SCH 400x300x200 enclosure, IP66, 2 lockable handles, 3x, 5x or 9x cable gland	163,-



Stainless steel cabinet

Robust stainless steel cabinet suitable especially for outdoor environments (stainless steel material does not show signs of aging in the weather, even after years, like plastic

The cabinet has IP66 protection, 2 loops or 2 lockable closures, metal cable glands M20 (4 pcs.) And M16 (5 pcs.), A GSM antenna on the side and a filter for balancing the atmospheric pressure inside the cabinet with the outdoor environment. The cabinet is fastened to the mast with two 1 $\frac{1}{2}$ "or 2" brackets. Due to its size, it is suitable for placing a battery up to 12 V / 45 Ah.

IN	Stainless steel cabinet 470x320x230, IP66, 2 loops, 9x metal cable gland	აან,-
ΙZ	Stainless steel cabinet 470x320x230, IP66, 2 lockable handles, 9x metal cable gland	354



Built-in version of the unit without cabinet

The upper part of the unit is designed for installation on the panel / door of the switchboard. The connection board type TA4, the power supply and the backup battery are located behind the panel in the body of the switchboard. The connection board is connected to the control unit with a flat cable. Installation of the unit into the panel requires mechanical modifications of the panel - creation of a mounting hole for passing a 40-core connecting cable and 4 holes for tightening screws.

Installing the unit on the cabinet door does not violate the enclosure protection, because thanks to the double sealing profile, this type of mounting achieves a high degree of IP67

Design for panel mounting

0,-

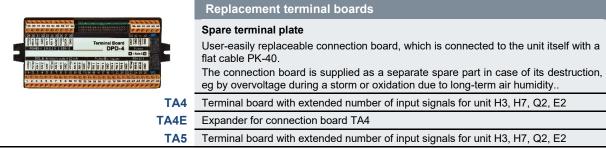
117,-

196,-

117,-

4,-

	Accessories for H3 and H7 units (E2, Q2)	
	Cover-holder for units H3, H7, E2 and Q2 Stainless steel cover of the unit, which also serves as a holder for this unit. The cover is attached to the vertical or horizontal boom using brackets T1 to T2.	
KR2-V	Stainless steel cover-holder for placing the unit on a vertical mast.	87,-
KR2-H	Stainless steel cover-holder for placing the unit on a horizontal boom.	87,-
KR2-V-G	Stainless steel cover-holder for placing the unit on a vertical mast, GSM antenna cover	94,-
KR2-H-G	Stainless steel cover-holder for placing the unit on a horizontal boom, GSM ant. cover	94,-
USB/H7	Connecting cable USB-A communication cable to units H3, H7, Q2 and E2.	Page 66
Anteny	Magnetic and directional GSM antennas with SMA connector GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector	Page 64
T1 to T2	Stainless steel stirrups Stainless steel brackets (A2) for attaching KR2 brackets to a mast or railing	Page 67
ST1, ST2, STO-MET-02	Stands for ARIA and SCH cabinets Hot-dip galvanized weldments for quick installation cabinets in the field	Page 67



Cable to the connection board

Connecting cable between unit H3, H7, Q2, E2, M4016 and the used terminal board

Connecting 40-core ribbon cable between the unit and the terminal board

PK-40

EXTERNAL INPUT-OUTPUT MODULES FOR CONTROL UNITS



Display Description Price EUR without VAT Type



Binary input / output module



The DV2 module expands the number of inputs and outputs of the control unit. Connection via RS485 to the M4016 unit under the FINET protocol and to the H7 type units under the MODBUS RTU protocol, DIN rail version (9 modules), supply voltage 12-24 V DC.

Outputs: 6 relays, switching contacts 250 V AC / 6 A, light signaling of closed relay. The setting of switching limits and hysteresis or time or logic control (regular alternation of pumps, tripping,...) is performed by setting parameters in the control unit.

Inputs: 16-binary inputs (switching against a common earth terminal by a potential-free contact or a sensor with an open collector), light signaling closed. entry.

DV2 External input / output module 260,-



W Analog outputs module

Current output modules 4-20 mA, input via RS485.

Active analog output, galvanic isolation of the output current, high accuracy of the output signal (16-bit converter), connection to the control unit via RS 485 protocol FINET, light signaling of supply voltage and data communication, mounting on a DIN rail. Up to 16 MAV420 / DIN modules can be connected to one unit. Power supply from M4016 unit or from 12-15 V DC source).

MAV421/DIN MAV422/DIN

External module, 1 galvanically isolated active current output 4-20 mA, RS485 input

External module, double active current output 4-20 mA, RS485 input

175,-

139,-



Analog input module

Current input modules 4 (0) .. 20 mA, output via RS485

Each module contains 6 current inputs 4-20 mA (0-20 mA). All inputs are galvanically isolated from the 10..26 V DC supply voltage and from the RS485 serial communication line. The data is transferred to the connected unit or control system under the Modbus RTU protocol. DIN rail mounting.

The AIM615 module contains a galvanically isolated voltage source of 15 VDC / 150 mA for powering the connected sensors.

AIM600

Převodník 6x 4(0)-20 mA / RS485, protokol Modbus RTU a Finet

Převodník 6x 4(0)-20 mA / RS485, Modbus RTU a Finet, výstupní napětí 15 V /150 mA **AIM615**

171,-

161,-



Water meter pulse signal splitter

Pulse signal splitter (REED, OPTO) from water meter

The pulse splitter ensures duplication (Output-A) and galvanic isolation of the water meter sensor pulses (Outputs-B, Output-C). Output-A forms the open collector of the transistor and is intended for connection to the pulse input of the register unit, from which the hub is usually powered. Output-A is not galvanically isolated from the supply voltage or the input OPTO/REED signal of the hub. Output-B and Output-C are galvanically isolated both from each other and from the supply voltage, and consist of a bi-directional semiconductor switch without polarity with an internal resistance of 4 Ω (typ.) and a maximum voltage of 28 VDC.

OPTO3 Water meter OPTO or REED signal splitter, supply voltage 3.5 to 24 V DC, 3 outputs 70,-



Display module

Module for displaying the level in meters, percentages and bargraph

A separate module measuring 120 x 80 mm with two LED displays and a bargraph equipped with an RS485 interface under the Modbus RTU protocol (slave mode).

In addition to the level height, the module also displays the percentage level height. The binary transistor output can be used to control a power relay (switching of a pump or solenoid valve, light or sound signaling).

Parameterization of the module using buttons and jumpers, adjustable 3 additional communication addresses using switches on the board (possibility of parallel arrangement of modules side by side).

The standard mechanical design is adapted for panel mounting.

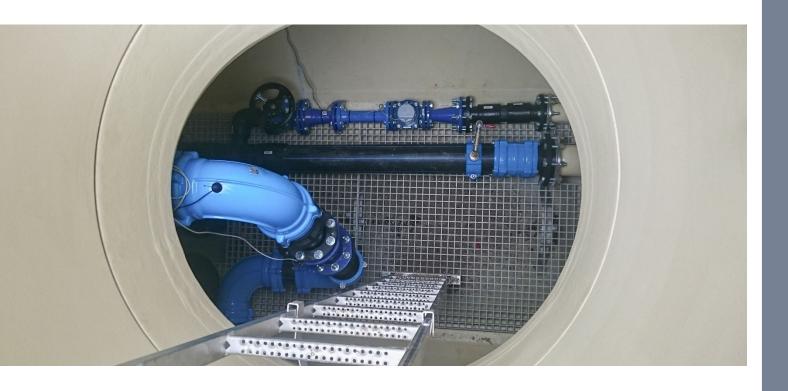
H520-B Level display module with bargraph, RS485 interface under Modbus RTU

121,-

**************************************	Data line surge protection	
LINE STATE STA	Combined overvoltage protection for RS485 or 4-20 mA data lines Two-stage overvoltage protection of two RS485 communication lines or 4-20 mA data lines and at the same time a 6 to 24 VDC power supply line, rated discharge current up to 10 kA, DIN rail mounting.	
PO2I	Combined overvoltage protection of data and power lines	49,-
3 (0-) 4** on Steam (-) 200	Other frequently used modules and accessories Current loop galvanic isolation module Current loop galvanic isolation module without auxiliary power supply The module is inserted into the primary current loop and creates a secondary active 4-20 mA current loop at its output. The module obtains energy from the primary current loop and therefore it is necessary to take into account the voltage drop in the primary loop of up to 4V.	
GX20	4-20 mA current signal repeater	115,-
M4016 ISC0 TYLEDY 2015/31 And COLUMN Date converter Date converter	Converter for ISCO Level converter for 3 binary signals between ISCO devices (binary signal output) and units M4016, H1, H3, (binary signal input) Binary signal level converter	48
B3OI	Dinary Signal level converter	48



DATALOGGERS AND TELEMETRY



H1, H2 - small telemetry stations	page 16	
H40 - compact telemetry station	page 17	(°p) H40 I=⊩
H50 - compact telemetry station with BT	page 18	(°P) <mark>≱ H50</mark> I⊐-
STELA - compact multi-channel station	page 19	(p)
MINILOG - temperature datalogger	page Chyb	a! Z ∉<mark>ožka</mark>

H1, H2 - SMALL TELEMETRIC STATION FOR WATER SUPPLY AND LWS



Display Description Price EUR without VAT Type













HYDRO LOGGER H1 is designed for monitoring of flows, pressures and levels in water meter shafts, in VDJ and ČS. The device transmits the measured data to the database to the server via its own GSM / GPRS + SMS modem, is powered by the battery and from an external source, has a graphic display for displaying instantaneous and accumulated values, battery status and for easy control of GSM field during installation.

Inputs: 2 pulse inputs for connecting water meters, 2 binary inputs, 3 analog inputs 4-20 mA, serial interface RS-485 (FINET protocol), internal temperature and humidity sensor.

Total number of recording channels: 8 analog, 8 binary, 5 control, 1 text. The control channels record, for example, the temperature and humidity inside the device, the amount of supply voltage of the battery and its remaining capacity or the amount of current taken

Data memory capacity: 2048 kB Flash type, 250,000 - 450,000 measured values. Mechanical design: Metal casting with high IP67 protection. Washable graphic display cover panel. Dimensions 160 x 90 x 80 mm.

HYDRO LOGGER H1

Small telemetry station in GSM / GPRS network

942,-















H2 - Small telemetry station for local warning systems - LWS

LEVEL LOGGER H2 was designed to monitor the level and flow in open streams and to monitor rainfall during the construction of local warning systems (LWS). The device transmits the measured data to the database via the GSM / GPRS + SMS modem at regular intervals to the server and in case of an emergency sends a warning SMS activated by a limit or gradient alarm of rising level or exceeding the moving sum of precipitation for a set time interval. Power supply of the device from the battery and from an external source, graphic display.

Inputs: 3 analog inputs 4-20 mA, 4x pulse-binary input, serial RS-485 interface.

Total number of recording channels: 8 analog, 8 binary, 5 control, 1 text.

Data memory capacity: 2048 kB Flash type, 250,000 - 450,000 measured values. Mechanical design: Metal casting with high IP67 protection. Washable graphic display cover panel. Dimensions 160 x 90 x 80 mm.

LEVEL LOGGER H2

Small telemetry station in GSM / GPRS network for LWS (Local Warning Systems)

942,-



Optional accessories for stations H1, H2

IP66 protection box with space for backup battery

Mounting stainless steel bracket

Mounting plate and 4 stainless steel screws for easy mounting of Loggers H1 or H2

Stainless steel bracket for H1.2 wall mounting, mounting screws and bolts DH1

8,-



Cover box IP66

Plastic box for protection of H1,2 station in outdoor or humid environment. The Thalassa box includes a stainless steel holder H1.2, a stainless steel base and 2 A2 brackets for attaching the box to the foot of the rain gauge, a meteorological mast, a boom, etc. When ordering, specify the required size of the brackets (1, 1 1/2 "and 2"). Dimensions of the box without mounting brackets: 240 x 195 x 90 mm, semi-permeable filter to protect against moisture condensation inside the cabinet.

Thalassa-H1

Plastic enclosure for protection H1,2, IP66, part of internal and external stain.steel handles 88.-



ARIA32 plastic cabinet for protection of a station working in a permanently humid, dirty or otherwise aggressive working environment. Enclosure IP66, space for inserting a backup battery 12V / 9 Ah (not included). Cabinet dimensions: 310 x 210 x 170 mm. Possibility of adding a lockable handle to the cabinet door, semi-permeable filter.

ARIA cabinet equipped for H1,2, IP66, space for backup battery. 12V / 9Ah, lock

ARIA cabinet equipped for H1,2, Protection IP66, space for backup battery 12V / 9Ah ARIA-H1

ER34615M

Spare battery

Page 61 Power supply Li-SOCI2 battery 3,6V, 13 Ah, Imax 2A, manufact .: GEBC

Antennas

Magnetic and directional GSM antennas with SMA connector GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector

Page 64

129,-

138,-

18.-

18,-

Page 64

H40 - SMALL SINGLE PURPOSE TELEMETRIC STATION



Display Description **Price EUR without VAT** Type











H40 - small single-purpose telemetry station

The H40 telemetry unit is housed in a robust stainless steel housing with a diameter of only 40 mm and is designed for measuring and recording a limited number of quantities and for the subsequent transmission of data to a superior system. The H40G station comes with a built-in GSM / GPRS + SMS communication module.

Inputs: the unit is equipped with a 7-pin connector with IP66 protection designed for connection of one sensor or measuring probe. The connector has an RS485 bus (FINET protocol), one 4-20 mA analog input and one pulse input.

Total number of recording channels: 6 analog, 2 binary, 5 control, 1 text. The control channels record, for example, the temperature inside the device, the amount of supply voltage of the battery and its remaining capacity or the amount of current taken by the connected sensor. Data memory capacity: 2048 kB Flash type, 250,000 - 450,000 measured values

Power battery: Replaceable 3.6V / 14Ah (28Ah) lithium block with cable connector and capacity for more than 2000 (4000) data sessions per server. Mechanical design: Stainless steel housing with a diameter of 40 mm, length 170 (250

HYDRO LOGGER H40G HYDRO LOGGER H40D Small single-purpose telemetry station in the GSM / GPRS network 667,-Data logger without data transfers to the server (does not contain GSM com. module) 533,-

Accessories and spare parts for the H40 station



Stainless steel hinge for H40

mm), protection IP66.

The holder for the telemetry station (Hydro logger) H40 is adapted for installation in a narrow pipe with an inner diameter of 50 mm (installation by hanging) or for wall mounting. The holder also contains a special mechanical clamp for the cable leading from the H40 unit to the sensor. The H40 recording unit itself is attached to the holder with plastic straps (supplied).

DH40-D

Stainless steel holder for hanging the H40G unit and pressure sensor in the borehole Stainless steel holder for hanging the H40D unit and pressure sensor in the borehole



Napájecí baterie

Replacement battery packs for H40G and H40D Page 61 Replacement battery packs with cable and connector for H40G and H40D data loggers



Antény

GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector

Magnetic and directional GSM antennas with SMA connector



H40-TSH22 set for monitoring levels and temperatures in wells

For measuring groundwater levels and temperatures in wells, we offer the H40G-TSH22 set consisting of a small H40G telemetry station containing a GSM communication module, a TSH22 pressure level sensor and a combined DH40 holder, which also forms the pressure sensor hinge. The entire level gauge assembly, including the hanging bracket, fits into a borehole with an inner diameter of 50 mm. Alternatively, we also supply a set without GSM / GPRS communication module: H40D-TSH22

The measuring range and cable length must be specified when ordering the kit. The standard measuring ranges of the TSH22 sensor are 0 to 7 m and 0 to 10 m of water column. The sensor is connected to the H40G hydrologger (D) via a detachable connector with IP66 protection. Other measuring range and required cable length must be specified in the order.

The sensor connector is equipped with a DA284 semi-permeable filter, which balances the atmospheric pressure inside and outside the sensor without letting air moisture into the sensor.

	Components for assembling the required measuring set:	
H40G	Small single-purpose telemetry station in the GSM / GPRS network	667,-
H40D	Data logger without data transfers to the server (does not contain GSM com. module)	533,-
TSH22-3-x	Immersion level sensor, range 0-x m, accuracy 0.3%, RS-485, price without cable	298,-
TSH22-1-x	Immersion level sensor, range 0-x m, accuracy 0.1%, RS-485, price without cable	356,-
C91-K7-P-F	Termination of the pressure sensor cable with a connector with a DA284 filter	25,-
PUR kabel	PUR cable to the level sensor, price for 1 m	3,-

H50 - SMALL TELEMETRIC STATION



Display Type Description **Price EUR without VAT**









PRELIMINARY



H50 small telemetry station with BT5 communication

The telemetry station in a stainless steel housing with a diameter of 50 mm is based in its concept on the proven mechanical construction of the STELA station. The diameter of the case allows to power the H50 station with a pair of ER34615M lithium batteries, which can be easily changed by the user. Unlike the H40 or STELA stations, the new H50 station does not need a cable connection to a PC for local communication with the user, because it uses the energy-saving Bluetooth BT5 interface with a long range in tens of meters. On the user's side, in order to communicate with the device, it is necessary to install the FIEDLER CONNECT application on a mobile phone, which can be downloaded from Google Play.

The station communicates with the server via the built-in GSM / GPRS module, as well as other telemetry stations. The station can also be parameterized remotely via the server. In addition to GSM / GPRS communication, data collection via the NB-IoT network is also being prepared.

Inputs: the unit is equipped with a 7-pin connector with IP66 protection designed for connecting a sensor or measuring probe. The connector has an RS485 bus (FINET or MODBUS protocols), one 4-20 mA analog input and two pulse / binary inputs. In addition, the connector also contains a user-adjustable output supply voltage for the connected sensor / probe.

Alternatively, the input connector can be fitted with an SDI-12 serial communication line and two analog inputs instead of the RS485 bus.

The H50 station contains self-diagnostics, which continuously monitors the status of supply batteries, the amount of current taken by the connected sensor / probe, internal humidity and temperature inside the device and some other variables that can cause extraordinary data transmission to the server if the user exceeds the set limit problem.

Total number of recording channels: 8 analog, 2 binary, 5 control, 1 text. The control channels record the outputs of the device's self-diagnostic functions.

Data memory capacity: 2048 kB Flash type, 250,000 - 450,000 measured values.

Power batteries: 2 pcs ER34615M.

Mechanical design: Stainless steel housing with a diameter of 50 mm, length 250 mm, protection IP66

Small telemetry station with BT5, 2 batteries, metal case, without communication module

H50-G Small telemetry station with BT5, 2 batteries, metal case, GSM / GPRS com. module

804,-675,-



Accessories for station H50

Stainless steel hinge for H50

The holder for the telemetry station (Hydro logger) H50 is adapted for installation in a narrow pipe with an inner diameter of 60 mm and larger (installation by hanging) or for wall mounting. The holder also contains a special mechanical clamp for the cable leading from the H50 unit to the sensor. The H50 recording unit itself is attached to the holder without straps by simply pressing the unit into the wings of the holder.

22,-Stainless steel holder for mounting the H50 unit and the cable of the connected sensor **DH50**



ER34615M

Spare battery Power supply Li-SOCI2 battery 3,6V, 13 Ah, Imax 2A, manufact .: GEBC

Page 61



Magnetic and directional GSM antennas with SMA connector

Antény

Page 64 GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector

STELA - TELEMETRIC STATION WITH LARGE BATTERY CAPACITY



Display Description Price EUR without VAT Type

















The small telemetry station STELA-3 (3rd generation of devices of this type) is designed for monitoring of flows, pressures and levels in water meter shafts, VDJ, ČS, in boreholes and everywhere where no external supply voltage is available. Built-in GSM / GPRS + SMS modem, robust stainless steel case with a diameter of 50 mm. The station is supplied in two basic versions differing in the number of replaceable 3.6V / 13Ah batteries:

STELA-3A contains 2 power supply batteries and is designed for data collection from pulse water meters, sensors and transducers with a current output of 4-20 mA or from intelligent measuring probes via RS485.

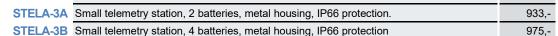
STELA-3B (picture on the left) contains 4 batteries connected in parallel and is suitable for those applications where communication with the server is required more than once a day or where more sensors are connected to the station. STELA-3B enables up to 10 years of operation on one battery charge during daily data sending to the server.

Thanks to its huge battery capacity, the STELA-3B is also suitable for long-term operation with a connected ultrasonic level sensor, which usually requires the presence of the supply voltage and the corresponding current consumption from the device for tens of seconds before a valid measurement result.

The measuring sensors are connected to the STELA station by means of a fixed 1 m long PUR cable. When ordering the device, the user can choose whether the cable end should be equipped with a round 7-pin connector or a terminal block located in the installation box of the DS02 holder.

Total number of recording channels: 8 analog, 2 binary, 1 text.

Data memory capacity: 2048 kB Flash type, 250,000 - 450,000 measured values.





Accessories for the STELA station

Holders for mounting the STELA station

The stainless steel holder DS01 with plastic pipe clamps does not contain a terminal block and is used for mounting Stely equipped with a connection connector.

The DS02 holder contains an installation box with a terminal block, to which the individual inputs of the device and the output voltage for powering the connected probes are connected by means of a cable.

DS01 Stainless steel holder for STELU without terminal block 30,-DS02 Stainless steel holder with installation box with terminal block 49,-



ER34615M

Spare battery

Power supply Li-SOCl2 battery 3,6V, 13 Ah, Imax 2A, manufact .: GEBC

Page 61



Antény

Magnetic and directional GSM antennas with SMA connector GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector

Page 64



REMOTE METER READING



H11, H12 - comfortable reading modules	page 21	
SMART metering radio modules	page 22	(()) ()
Speed sensors for water meters	page 24	
Converters for electricity meters	page 25	



Display Type Description **Price EUR without VAT**







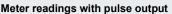












Hydro Meter H11 is a wireless GSM or Narrowband module for remote meter readings (water meters, electricity meters, gas meters,...) with pulse output, ie smart metering. Communication is realized by GPRS (H11-G) or NB-IoT (H11-N) technology and data transmissions are performed automatically at regular intervals according to the settings of the module parameters or it can be initiated locally by command via NFC. Data transmissions are realized through the existing network of GSM operators. The data transferred to the Internet are recorded in a database (CloudFM service - graphs, tables,...).

The device automatically logs on to the network of the operator with the strongest signal at the place of installation of the module, including foreign operators, while maintaining the same operating costs for the transmitted data (valid within the European Union). The device is without a classic SIM card, ie quick installation without administration associated with procuring a suitable SIM card.

You can monitor the status of the water meter counter and some extraordinary events such as: backflow detection, exceeding the maximum flow value, exceeding the night minimum, detection of sensor disconnection from the water meter, detection of low battery voltage and battery disconnection.

The current status of the water meter counter is read daily. The frequency of data transmissions can be configured at daily, weekly or monthly intervals. Extraordinary events are sent with priority as soon as they are detected.

Hydro Meter H11-G/3P Module for remote meter readings in GSM network, 3 inputs, glob. SIM, bat. 3.6V/12Ah

206,-

Hydro Meter H11-N/3P

Module for remote meter readings in Narrowband network, 3 pulse inputs, bat.3,6V/12Ah

206,-

SMART MODULES IN THE RADIO NETWORK (LORA, SIGFOX)



97.-

98,-

97,-

98,-

Display	Type Description	Price EUR without VAT
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Smart Metering Module S130-L (LoRa technology)

The S130-L smart modules use LoRa technology for data transfer. The modules are designed for remote readings of water meters with pulse output. Up to two water meters or one water meter with backflow detection can be connected to one module and both the flowed volume in the main direction and any backflow or disconnection of the radio module from the water meter can be recorded.

The cable for connecting the pulse sensor / water meter is 2 m long. For the connection of the water meter outlet, jumpers with IP68 protection can be used with the S130 module. Smart metering modules S130 are supplied either in a version with an internal antenna or in a version with an SMA connector for connecting an external external antenna.

Data transmissions can be realized directly via the existing LoRa radio network. The data transferred to the Internet are recorded in a central database (CloudFM service).

Module for remote readings in LoRa network, 2 inputs, 3.6V / 2.8 Ah battery, IP66 $\,$

\$130-L/SMA Module for remote readings in LoRa network, SMA connector, 2 inputs, bat.3,6V/2,8Ah





Smart Metering Module S130-S (Sigfox technology)

The S130-S smart modules use Sigfox technology for data transfer. The modules are designed for remote readings of water meters with pulse output. Up to two water meters or one water meter with backflow detection can be connected to one module and both the flowed volume in the main direction and any backflow or disconnection of the radio module from the water meter can be recorded.

The cable for connecting the pulse sensor / water meter is 2 m long. For the connection of the water meter outlet, jumpers with IP68 protection can be used with the S130 module. Smart metering modules S130 are supplied either in a version with an internal antenna or in a version with an SMA connector for connecting an external external antenna. Data transmissions can be realized directly via the existing Sigfox radio network. The data transferred to the Internet are recorded in a central database (CloudFM service).

Module for remote readings in Sigfox network, 2 inputs, battery 3.6V / 2.8 Ah, IP67

Module for remote readings in Sigfox network, SMA connector, 2 inputs, bat.3,6V/2,8Ah





IoT gateway GW8EL (-IL)

The GW8 gateway is a compact wireless device that serves as a data concentrator from sensors equipped with LoRa communication modules (S130-L, H11-L). Sensors installed up to 3 km away can publish data to the cloud via the gateway. The maximum recommended number of connected sensors from around the gateway depends on the frequency of communication and network occupancy, typically data can be transmitted for up to hundreds of sensors using one gateway.

Data is transmitted securely along the entire communication path thanks to several levels of encryption so that it is possible to transmit not only public but also private data without worrying about their security. The measured data are available to users via cloud services. Regular transmission of data from sensors can be performed automatically up to several times an hour. In addition, emergency messages and alerts can be sent outside of standard communication intervals, in the event of alarm situations.

The gateway also supports data transfer in the opposite direction, ie from the cloud to the sensor. The administrator can then perform remote configuration of smart sensors (change the interval of sending data, etc.). In addition to the actual data concerning the sensors, it is also possible to record network parameters, eg monitor signal quality parameters.

External (-EL) and internal (-IL) versions of the gateway are available. Power supply and connectivity are solved for outdoor installation via a single common Ethernet cable with the PoE standard. The exterior of the gate is also equipped with preparation for installation on a mast for easy installation. An Ethernet cable is also included in the gateway package. The version marked-G in the name contains an integrated GSM / GPRS module. The gateway can therefore be operated even without an available fixed data connection, if the signal of one of the mobile operators is available at the site.

GW8EL-G GW8EL-E Communication gateway in the LoRa network, 8 channels, internal GSM/GPRS module

Communication gateway in LoRa network, 8 com. channels, internal Ethernet module

on request

PRELIMINARY













Hydro Meter H11-L/3P Hydro Meter H11-L/485

Hydro Meter H11-L (LORA technology)

H11-L radio modules for remote meter readings, LoRa technology, 3 pulse inputs (water meter, electricity meter, disconnection detection,...) or RS485 serial interface for connecting an external sensor, large 18 Ah lithium primary battery for many years of operation without replacement, local NFC device parameterization for easy installation.

Data transmissions are realized directly via the LoRa radio network. The data transferred to the Internet are recorded in a central database (CloudFM service - graphs, tables, ...).

Module for remote meter readings in LoRa network, 3 pulse inputs, 3.6V / 18 Ah battery

On request On request

Module for remote meter readings in LoRa network, RS485, 3.6V / 18 Ah battery, IP67

PRELIMINARY













Hydro Meter H11-S/3P Hydro Meter H11-S/485 Hydro Meter H11-S (SIGFOX technology)

H11-S radio modules for remote meter readings, Sigfox technology, 3 pulse inputs (water meter, electricity meter, disconnection detection,...) or RS485 serial interface for connecting an external sensor, large 18 Ah lithium primary battery for many years of operation without replacement, local NFC device parameterization for easy installation.

Data transmissions are realized via the Sigfox radio network. The data transferred to the Internet are recorded in a central database (CloudFM service - graphs, tables,...).

Module for remote meter readings in SIGFOX network, 3 inputs, 3.6V / 18Ah battery, IP67 On request

Module for remote meter readings in SIGFOX network, RS485, 3.6V / 18Ah battery, IP67 On request

SPEED SENSORS FOR WATER METERS



Display	Type Description	Price EUR without VAT





Remote meter reading - Inductive speed sensors for water meters



Inductive water meter speed sensor, output constant 1 l/pulse, (10 l/pulse for FLOSTAR water meters), sensing principle ensures absolute compliance with the water meter counter, non-magnetic non-contact principle - cannot be affected by external magnetic field, sensor does not generate false pulses in case of vibrations, etc. ., service life does not depend on the number of switchings - battery capacity 12 years, uniform output for all types of ACTARIS water meters DN 15 - 500 mm, return flow recording, possibility of accurate reading of the return flow value (CYBLE VF), protection IP 68 - works reliably in in case of immersion, simple assembly and disassembly without interfering with the counter and breaking the water meter seal, direct connection to pulse inputs M4016, STELA, H1, H3, H7 or Q2.

	M4010, STELA, F1, F3, F7 OF Q2.	
	Cyble NF - one output with backflow compensation	
CYBLE NF 001	Water meter sensor for FLOSTAR and FLODIS water meters, one output, K = 1	83,-
CYBLE NF 010	Water meter sensor for FLOSTAR and FLODIS water meters, one output, K = 10	83,-
CYBLE NF 100	Water meter sensor for FLOSTAR and FLODIS water meters, one output, K = 100	83,-
CYBLE NF 002	Water meter sensor for water meters FLOSTAR and FLODIS, one outputs, K = 2.5	83,-
CYBLE NF 025	Water meter sensor for water meters FLOSTAR and FLODIS, one outputs, K = 25	83,-
	Cyble VF - two outputs, one with backflow compensation, direction identification	
CYBLE VF 001	Water meter sensor for FLOSTAR and FLODIS water meters, two outputs, K = 1	94,-
CYBLE VF 010	Water meter sensor for FLOSTAR and FLODIS water meters, two outputs, K = 10	94,-
CYBLE VF 100	Water meter sensor for water meters FLOSTAR and FLODIS, two outputs, K = 100	94,-
CYBLE VF 002	Water meter sensor for FLOSTAR and FLODIS water meters, two outputs, K = 2.5	94,-
CYBLE VF 025	Water meter sensor for FLOSTAR and FLODIS water meters, two outputs, K = 25	94,-
	Cyble M-BUS	
CYBLE M-BUS	Water meter sensor for FLOSTAR and FLODIS water meters, M-BUS	94,-





Sensors for ELSTER water meters



Inductive speed sensors for ELSTER water meters, built-in battery for up to 10 years of operation, IP68 protection, cable length 2 m, output load 30 VDC / 30 mA, frequency max 75 Hz, pulse width CH 1P = 5 ms, CH 2P = 50 ms.

Type PR6 is designed for water meters: V200, V210, V220F and C4000

Type PR7 is designed for water meters: H4000, H4200, S2000, C4000, C3100

ELSTER FALCON PR6 ELSTER FALCON PR7

Speed sensor for water meters ELSTER, outputs, K = 11 / pulse and K = 101 / pulseSpeed sensor for water meters ELSTER, outputs, K = 11 / pulse and K = 101 / pulse

Remote meter reading - OPTO speed sensors for water meters



OPTO sensor for water meters ABB, Hydrometer, Sensus Metering System (formerly Meinecke), Schlumberger, etc. The current consumption of the sensor requires mains supply of the connected datalogger - telemetry station M4016 or H1 with external mains supply.

VC-08, -09, -10, -11 OPTO sensors for the water meter

OPTO sensors

147,-

104,-

118,-



OPTO sensor with low current consumption for water meters ABB, Hydrometer, Sensus Metering System (formerly Meinecke), Schlumberger, etc. The current consumption of the sensor does not require mains supply of the connected datalogger and is therefore suitable for stations powered by internal lithium battery or accumulator (station M4016 H1 or STELA).

OPTO sensor with low current consumption for the water meter VLP-08, -09, -10, -11

160,-

VLP-9A- bidirectional

Bidirectional OPTO sensor for water meters ABB, Hydrometer, Sensus Metering System (formerly Meinecke), Schlumberger, etc. The current consumption of the sensor requires mains supply of the connected datalogger - telemetry station M4016, H1.

218,-

CONVERTER AND TRANSDUCER FOR ELECTRICITY METERS



52,-

60,-

Display Type Description Price EUR without VAT









ELM1 – converter with infrared communication for electricity meters

The ELM1 converter is designed for remote reading of electricity consumption. It can be used with electricity meters commonly used by energy distribution companies. Using the supplied cable, the converter is connected to FIEDLER data loggers via the RS485 bus under the MODBUS RTU protocol.

The ELM1 converter enables infrared data communication with electricity meters according to the ČSN EN 62056-21 standard in the C protocol mode, which defines bidirectional data exchange with communication speed switching.

A typical example of the use of the ELM1 converter are remote digital readings of consumed electrical energy in households, industrial plants or apartment buildings. The advantage of digital reading over the usual pulse counting is the transmission of absolute consumption.

Converter ELM2 is certified for use in the CEZ distribution network.

ELM1 converter with infrared communication for electricity meters, output RS485, Modbus RTU converter for electricity meters certified for use in the CEZ distribution network; RS485.

converter for electricity meters certified for use in the CEZ distribution network; RS485, Modbus RTU

25



MEASUREMENT OF WATER LEVEL



Tensometric level sensors	page 27	
Ultrasonic level sensors	page 28	
Radar level sensors	page 29	
Level float switches	page 30	
Level meter for fire trucks	page 31	
Level gauges for wells, boreholes or pits	page 32	

TENSOMETRIC LEVEL SENSORS



Display	Туре	Description Price EUR wit	thout VAT
213	B W	Hydrostatic level sensors with RS485 output	
\			
RS485		TSH22 and TSH37 sensors (RS485 / FINET or Modbus RTU output) Immersion pressure level meter and water temperature sensor - measurement in open streams, boreholes, etc. Stainless steel design. Level measurement accuracy 0.3% (0.1%) of range, water temperature measurement accuracy ± 0.5°C. RS-485 data output under FINET or Modbus RTU protocol. Supply voltage 6-14 V DC. The total price of the level meter is determined by the accuracy of the sensor and the length of the cable.	
		Measuring ranges TSH22: 05 m, 7 m, 10 m water column (H ₂ O)	
		Measuring ranges TSH37: 01 m, 2.5 m, 4 m, 6 m, 10 m, 25 m, 40 m, 100 m H_2O .	
	TSH22-3-x	Level sensor, range 0-x m, accuracy 0.3%, RS-485, price without cable	298,-
	TSH22-1-x	Level sensor, range 0-x m, accuracy 0.1%, RS-485, price without cable	356,-
	TSH37-x	Level sensor, range 0-x m, accuracy 0.1%, RS-485, price without cable	363,-
		LMP307i / 485 sensors (RS485 / Modbus RTU output) Immersion level meter, stainless steel design, PUR cable, measuring accuracy 0.1% of range. Supply voltage 8-15 V DC. The total price of the sensor is given by the measuring range and the length of the cable. Measuring ranges: 01 m, 1.6 m, 2.5 m, 4 m, 6 m, 10 m, 16 m, 25 m, 40 m, 100 m H ₂ O	
Contract of the Contract of th	L MD007:/405		f: 000
•	LMP3071/485-X	Immersion level sensor 0.1%, range 0-x m, RS485 output, price without cable	fr 383,-
		Hydrostatic level sensors with 4-20 mA output	
11		Sensors type LMP307 (4-20 mA Output) Immersion level meter, stainless steel design, PUR cable, measuring accuracy 0.35% of range, 4-20 mA or RS485 output (LMP307i). Supply voltage 12-26 V DC. The price of the sensor is given by the measuring range and the length of the cable. Measuring ranges: 1m, 1.6 m, 2.5 m, 4 m, 6 m, 10 m, 16 m, 25 m, 40 m, 100 m H₂O.	
	LMP307i/4-20-x	Immersion level sensor 0.1%, range 0-x m, output 4-20 mA, price without cable	fr 458,-
	LMP307-x	Immersion level sensor, range 0-x m, 4-20 mA output, price without cable	fr 319,-
	•	Sensor type TSH35 (4-20 mA Output) Immersion level gauge, stainless steel, PUR cable, measurement accuracy 0.5% of range, output 4-20 mA. Supply voltage 8-26 V DC. Price determined by cable length.	
	TSH35-10/10	Submersible level sensor, range 0-10 m $\rm H_2O$, 4-20 mA output, 10 m cable	217,-
	TSH35-10/x	Submersible level sensor, range 0-10 m H_2O , output 4-20 mA, price with cable min 20m	fr 247,-
	W	LMK858 and LMK809 sensors (ceramic membrane, increased resistance) Immersion pressure level sensor in a plastic housing with a ceramic membrane. LMK858 sensors have a removable cable part. The sensors are suitable for polluted water (sludge sumps, sewage water). Measurement accuracy 0.35% of range, 4-20 mA output. The price of the sensor is given by the length of the cable.	
		Measuring ranges: 0.4m, 0.6m, 1m, 2.5m, 4m, 6m, 10m, 16m, 25m, 40m, 60m, 100m	
	LMK809-x		fr 416,-
	LMK858-x	Level sensor, range x m, 4-20 mA, removable cable part, price without cable	fr 480,-
	\	Accessories for hydrostatic level sensors PUR cable Polyurethane 4-core cable for level sensors supplemented with a compensating capillary of atmospheric air pressure. The free end of the cable can be equipped with a 7-pin compensation capillary protection.	
	DIID kohol	connector with a built-in DA284 filter (compensation capillary protection). PUR cable to the level sensor, price for 1 m	2
		Termination of the pressure sensor cable with an IP66 connector with a DA284 filter	3,- 25,-
	031-R7-F-F	The filter compensates for differences in atmospheric air pressure inside and outside the housing, while not letting water molecules into the housing. This prevents moisture condensation inside the sensor.	20,-
	DA284	Filter with a special semi-permeable membrane for equalizing atmospheric pressure	4,-
12 12		Hinge for pressure sensor Stainless steel hinge for stable attachment of the cable of the immersion pressure sensor. The hinge can be used when installing the sensor in a reservoir or a borehole.	
111 2111	Zaves J	Large stainless steel hinge for attaching the PUR cable of the pressure sensor	28,-
	Zaves U	Small stain.steel hinge for attaching the PUR cable of the pressure sensor, span 30 cm	20,-

ULTRASONIC LEVEL SENSORS



Display	Type	Description Price EUR wi	thout VAT
₩	B W	Ultrasonic level meters with RS485 output	
€		Ultrasonic level sensors with digital data output	
RS485		Measured value within 2 sec from power on - suitable for battery-powered devices, RS485 output, digital filter of measured values, adjustable damping and measurement frequency, automatic temperature compensation, supply voltage 12-24V / 20 mA.	
1007.7	3	Data output: RS485 and DCL current loop (0/20 mA) for a distance of up to 1000 m.	
100	US1200	Ultrasonic level sensor, range 0.15 to 1.2 m, RS485 and DCL output, 3 m cable	655,-
	US3200	Ultrasonic level sensor, range 0.25 to 3 m, RS485 and DCL output, 5 m cable	698,-
	US4200	Ultrasonic level sensor, range 0.35 to 4.2 m, RS485 and DCL output, 5 m cable	725,-
		Ultrasonic level sensors with digital data output in the radiation shield Suitable for outdoor use, where the radiation cover of the sensor reduces the measurement error caused by the different temperature of the sunlit sensor and the temperature of the air under the sensor. The sensor also includes a stainless steel holder for attaching it to the horizontal boom.	
	US4200/RK	Ultrasonic sensor in radiation cover, range 0.35 to 4.2 m, RS485 and DCL output	854,-
	US kabel	PUR cable shielded to USX00 sensor, price for 1 m	3,-

7	
RVSLED************************************	
CE MARKET	

В	W	Ultrasonic level meters with 4-20 mA output	
		Ultrasonic level sensors with 4-20 mA output and HART protocol Supply voltage 11-12 to 36 V DC, operating temperature -30 80 ° C, small radiation angle 5-7 ° ensures reliable measurement even in narrow spaces, degree of protection IP 68 allows the sensor to be flooded without damaging it. Standard 4-20 mA analog output with HART communication. Measurement error less than 1% of range.	
SPA-	5A0-4	Ultrasound level sensor, range 0.15-3 m, output 4-20 mA, cable 5 m, IP68	630,-
SPA	-590-4	Ultrasound. level sensor, range 0.18-5 m, output 4-20 mA, cable 5 m, IP68	630,-
SPA	-580-4	Ultrasound. level sensor, range 0.2-8 m, output 4-20 mA, cable 5 m, IP68	630,-
SPA	-570-4	Ultrasound. level sensor, range 0.25-10 m, output 4-20 mA, cable 5 m, IP68	630,-
SPA	-560-4	Ultrasound. level sensor, range 0.25-12 m, output 4-20 mA, cable 5 m, IP68	758,-
SPA	-540-4	Ultrasound. level sensor, range 0.35-18 m, output 4-20 mA, cable 5 m, IP68	829,-

	W	Holders for ultrasonic level meters	
	DUP1 to DUP6	Stainless steel holders for Parshall troughs Series of stainless steel holders for mounting ultrasonic probes above Parshall troughs	Page 36
		Side console holder for ultrasonic sensors	
	DU1-10 to 40	Stainless steel ultrasonic holder. probe side console. Lengths 10, 15, 20, 30 and 40 cm	35,-
	DU1-50 to 80	Stainless steel holder ultrasonic probe side console Lengths 50, 60, 80 cm	41,-
		Holders with radiation and protective cover Robust holders equipped with a stainless steel cover, which protects the sensor from the effects of sunlight and partly from vandalism. DUK8 brackets are supplied with a horizontal boom designed for installation on a vertical flat surface or adapted for attachment to a railing.	
	DUK1	Sensor holder including protective cover, installation on a vertical mast	98,-
	DUK2	Sensor holder including protective cover, installation on a horizontal boom	107,-
	DUK8	Sensor holder including protective cover and horizontal boom 800 mm	178,-
$\overline{ \cup \cup \cup }$	T1 to T2	Stainless steel stirrups Stainless steel brackets (A2) for attaching DSPXX brackets to the mast	Page 67



Type Display Description Price EUR without VAT

Radar level meters

Due to their high accuracy and stability of measurement, radar sensors are used to measure the level of liquids, liquid mixtures, emulsions and sludges wherever there are increased requirements for the achieved accuracy and reliability of measurement. Radar sensors can also be used in operations with the presence of steam above the surface, where ultrasonic sensors stop working reliably.

The measuring principle of radar level sensors is based on measuring the frequency shift of the reflected echo of the microwave pulse. The speed of emitted pulses is practically the same in air, gases and vacuum, and moreover it is not affected by temperature and pressure



Radar sensors designed for water supply, wastewater treatment and industry

Affordable high-frequency radar level sensors for water, wastewater and industry, twowire connection of 4-20 mA to stations H1, H2, H3, H7 or Q2, even in battery-powered assemblies operating in switched mode, high measurement accuracy up to 2 mm in full measuring range, durable design with IP68 protection, all-plastic design without metal parts, zero dead band and narrow beam angle of 8 ° thanks to the used measuring frequency 80 GHz, possibility of measuring through a plastic vessel wall, wide operating temperature range from -40 ° C to + 60 ° C, supply voltage from 12V to 35 VDC, integrated Bluetooth module for easy parameterization via a mobile phone application, HART protocol. Alternatively, for an additional charge, ATEX version for explosive atmospheres and Modbus or SDI-12 output signal.

VEGAPULS C 11 VEGAPULS C 21 VEGAPULS C 23 Radar level sensor, range 15 m above sea level, 4-20 mA output, PUR cable 6 m, IP68 833,-975,-Radar level sensor, range 15 m above sea level, 4-20 mA output, PUR cable 6 m, IP68 Radar level sensor, range 15 m above sea level, 4-20 mA output, PUR cable 6 m, IP68

1 208.-



Contactless radar sensor PiloTREK series W-200

The PiloTREK W-200 series non-contact level sensor uses state-of-the-art 80 GHz FMCW radar technology for accurate level measurement of liquids, slurries and bulk solids with larger fractions.

With a 4...20 mA output (2-wire) it can be connected to H1, H2, H3, H7 evaluation units, even in battery-operated switching mode.

The PiloTREK sensor offers an accuracy of ±5 mm for the model with a range of up to 10 m and ±2 mm for the model with a range of up to 20 m. Measurements are possible from the antenna tip because the sensor has no dead zone and the full radiation angle is only 7°. Supply voltage 12 to 24 VDC.

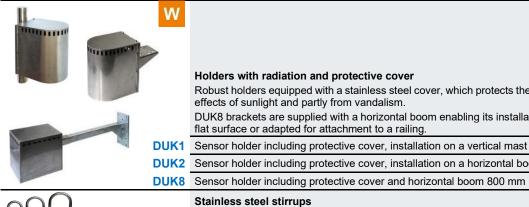
The sensor housing is made of Polypropylene with IP 68 protection. The process connection consists of top and bottom threads fitted with nuts. The electrical connection is via an integrated 5 m long cable. Communication and setting of the sensor via HART protocol, BT in preparation



WPA-224-4 PILOTREK

WPA-214-4 PILOTREK Non-contact radar, G 1 1/2", cable 5 m, PP housing IP68, range 0..10 m, 4-20 mA out 629, Non-contact radar, G 1 1/2", cable 5 m, PP housing IP68, range 0..20 m, 4-20 mA out

830,-



Holders with radiation and protective cover

Robust holders equipped with a stainless steel cover, which protects the sensor from the effects of sunlight and partly from vandalism.

DUK8 brackets are supplied with a horizontal boom enabling its installation on a vertical flat surface or adapted for attachment to a railing.

DUK2 Sensor holder including protective cover, installation on a horizontal boom **DUK8** Sensor holder including protective cover and horizontal boom 800 mm

Stainless steel stirrups

T1 to T2 Stainless steel brackets (A2) for attaching DSPXX brackets to the mast 98,-

107,-

178,-

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FLOAT LEVEL SENSORS AND SWITCHES



Display Description **Price EUR without VAT**







Float level meter

The float continuous level sensor can serve as a main or secondary sensor when measuring the water level in limnographic shafts, wells, boreholes, sumps and wherever a H1, H7, Q2, M4016 unit or a STELA unit is equipped for data recording.

Float level sensor PSH30

Contactless evaluation of pulley rotation (magnetic position sensing method), level resolution 1mm, practically unlimited measuring range 0-30 m vs, stainless steel cable, communication with unit M4016 (H1, STELA-3) via RS485 bus, very low current consumption at rest (max. 100 uA) practically does not load the power supply battery of the unit, setting and calibration of the measured level via the keyboard of the M4016

PSH30 Float level sensor, range 0-30 m, RS485 output

527,-

+ 3,-







Level float switches

NIVOFLOAT float switches series NL-100

The float switches of the NIVOFLOAT NL-100 series are used for switching the required levels of drinking and waste water. The double polypropylene housing enables perfect watertightness and the cable length of 5.10, 20 m in PVC or neoprene design meets even the most demanding requirements. Inside the float is a built-in mercury-free switch, which switches at an angle of 45 °



NLP-105	Float level switch for clean water, PVC cable 5 m	28,-
NLP-110	Float level switch for clean water, PVC cable 10 m	36,-
NLP-120	Float level switch for clean water, PVC cable 20 m	53,-
NLN-105	Float level switch for clean water, neoprene cable 5 m	36,-
NLN-110	Float level switch for clean water, neoprene cable 10 m	53,-
NLN-120	Float level switch for clean water, neoprene cable 20 m	90,-





NMW-100 Weights for NL switch

NIVOFLOAT float switches NW-100 series

For very demanding applications, the NW-100 series was created, which has a robust construction and almost 2x larger float volume than the NL series. Thanks to the larger volume, the float has a better ability to work in denser liquids. Another advantage is the functionality without counterweights.



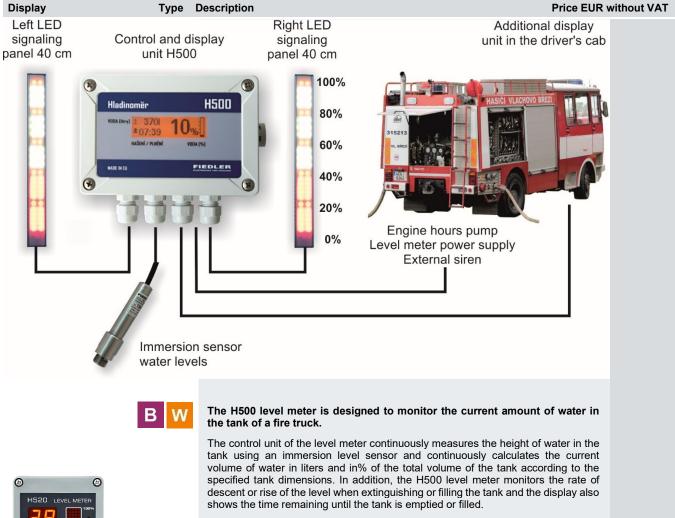
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NWP-105	Float level switch for polluted wastewater, PVC cable 5 m	101,-
NWP-110	Float level switch for polluted wastewater, PVC cable 10 m	110,-
NWP-120	Float level switch for polluted wastewater, PVC cable 20 m	126,-
NWN-105	Float level switch for polluted wastewater, neoprene cable 5 m	109,-
NWN-110	Float level switch for polluted wastewater, neoprene cable 10 m	126,-
NWN-120	Float level switch for polluted wastewater, neoprene cable 20 m	163,-

800,-

121,-

H500 - LEVEL GAUGE WITH SIGNALING FOR TANKS AND FIRE TRUCKS





The H500 level meter includes two high-brightness LED signaling panels with a height of 400 mm, which are intended for installation on the sides of a fire truck.

H500 Level meter set for fire trucks, level sensor, 2 signaling LED panels External display unit to the driver's cab, communication with H500 via RS485 (The standard mechanical design is adapted for panel mounting.)

H520-B

LEVEL, BORN OR RETENTION TANK LEVEL GAUGES



Display Type Description Price EUR without VAT





Assembly of a simple level meter with a bargraph into a well or well



The assembly of the H520 level meter and the TSH27 immersion absolute pressure level sensor is intended for measuring the level in wells, boreholes, sumps and rainwater retention tanks.

The two red LED displays of the H520 level meter show the measured level in meters and the percentage level relative to the set maximum level. The percentage level is also clearly shown on a bar graph. The measured level is displayed with a resolution of 0.1 m. The device also includes a binary output for controlling an external relay depending on the set level limits. The device is parameterized manually using 3 buttons and an LED display.

The H520 level meter does not have its own power supply battery and therefore requires an external supply voltage in the range of 5 to 28 V DC / 0.15 A. The level meter does not allow remote access to the measured data (it does not contain data memory or communication module).



Level meter with LED, measuring range 0..10 m, typ. accuracy 2,5%, PUR cable 10 m

Level meter with LED, measuring range 0..10 m, typ. accuracy 2,5%, PUR cable 25 m

205,
Level meter with LED, measuring range 0..25 m, typ. accuracy 2,5%, PUR cable 30 m

215,-

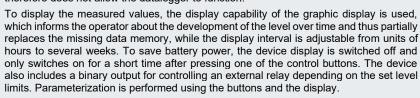






Simple level meter for the well with the possibility of data transfers

In the basic version, the H531 level meter, together with the TSH28 immersion level sensor, is intended for measuring the level in wells, boreholes, or in sumps and rainwater retention tanks. This inexpensive H531 level meter does not have data memory and therefore does not allow the datalogger to function.



In addition to the inexpensive TSH28 sensor, the electronic connection of the level meter also allows the connection of an level sensor with a 4-20 mA output.

Because the level meter is primarily battery powered, it does not require the presence of an external supply voltage for its operation. However, external power supply of the device is possible and allows, in addition to continuous measurement, also permanent switching on of the backlit graphic display.

The **H531-G** level meter contains a GSM/ GPRS communication module, which transmits the measured values once a day on the manufacturer's server, where they are accessible in the form of a graph or table to the user. A user can only have access to one H531-G level meter on the manufacturer's server. The operating costs of data hosting, including the costs of data transmissions in the GSM network, are included in the purchase price of the level meter for the first 5 years of operation. Then it is possible to purchase the continuation of these services in the form of a data package (see **Data packages**).

H531-G	Level meter measuring unit with GSM/GPRS com. module, without level sensor.	260,-
TSH28-10/10	Immersion level sensor, measuring range 010 m, typ. accuracy 2,5 %, PUR cable 10 m $$	93,-
TSH28-10/25	Immersion level sensor, measuring range 010 m, typ. accuracy 2,5 %, PUR cable 25 m $$	106,-
TSH28-25/30	Immersion level sensor, measuring range 025 m, typ. accuracy 2,5 %, PUR cable 30 m $$	120,-
TSH28-100/X	Level sensor, measuring range 0100 m, type. 2.5% accuracy, PUR cable length X m	On request
TSH35-10/10	Submersible level sensor, range 0-10 m $\rm H_2O$, 4-20 mA output, 10 m cable	216,-
101100 10/10	Cabinotesia is to the cabinotesia is a market and a marke	,





Optional accessories

Mains power supplies

The mains adapter to the socket or the power supply to the DIN rail are intended for powering the H520 or H531 level meters. The H531 contains a battery pack that is disconnected in the presence of an external supply voltage to save capacity.

AC/DC-LV1203 HDR-15-12

External power supply for DIN rail (1 module width), output 12 V DC / 1.25 A

Spare battery
Power supply

ER34615(M)

Power supply Li-SOCI2 battery 3.6 V for level meters H531 and H531-G

Mains adapter for powering H500 series level meters, 12 V DC / 3 A output

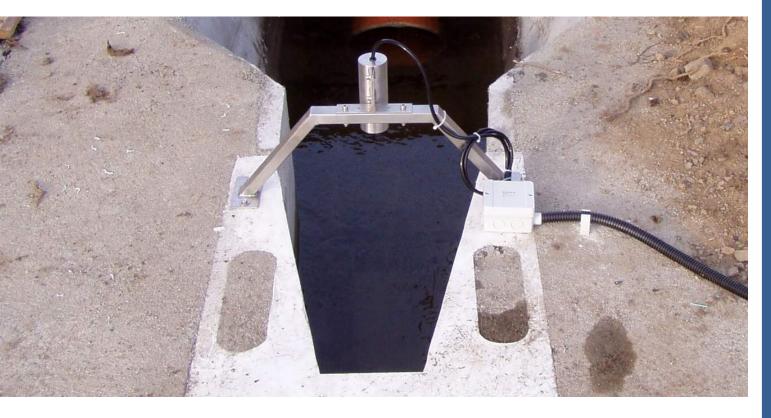
32

19.-

18,-

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MEASUREMENT OF FLOWS



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EVALUATION UNITS FOR MEASUREMENT OF FLOWS AND LEVELS



Type Display Description Price EUR without VAT





Device

Q2 Q2/KDO





Principle of flow measurement: If water flows through a specific overflow of a defined shape or a standardized measuring trough, the instantaneous flow and subsequently the flowed volume can be calculated from the measured level at a given location using the appropriate consumption

Q2, Q2/KDO Four-channel flow meter, level meter, control unit.

Measurement, display and time recording of instantaneous flow as well as daily and monthly flow volumes; preset consumption equations for Parshall troughs and specific overflows, table input of Level / Flow dependence; backflow control, speed KDO probe support (Q2 / KDO), color touch screen, IP67 protection, data acquisition and parameterization via the Internet (-G)

16 recording channels for recording layers and mathematical calculations over the channels

16 binary channels adjustable as input / output, monitoring of movements and faults of motors, umps, inputs to the building,... An operation counter can be set for selected channels. throw.1 text channel (SMS recording, data sessions to the server, faults of connected sensors, ...)

Supply voltage: 12 28 VDC, 230 V / 50 Hz or battery 12 V / 7 to 45 Ah.

Control: limit, time and logic relay control, 4xPID controller. Depending on the type of connection board, up to 4x relays (control of other relays in external modules DV2, DV3), up to 2x active current output 4-20 mA, (additional outputs 4-20 mA using external modules MAV42x / DIN).

Communication interface: USB mini: device parameterization, transfer of measured data RS-485-I: data acquisition from connected sensors under FINET and MODBUS RTU protocol.

RS-485-II: data collection from connected sensors, control of external modules, data transfer to the superior system under the MODBUS RTU protocol.

SDI-12 (TA4): data acquisition from connected sensors and transducers.

	Q2 255	FIEL	LER
MAGNET IN MAGNET	pj ne	35.14	1.0
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	es	arc		Q2 unit,
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Φ	Ε	.⊆	.⊑	02-11-

Configuration examples:

(800, -+250, -+196, -=1.246, -)

internal GSM communication module, TB2 connection board, power supply external 12-24 V DC source, internal Li-Pol battery, location in an Al box outlets

O2-U-TA4-A (800 - + 0 + 117 - + 129 - = 1046 -)

– Com. r	– Termii	– Housi	unit Q2, connection board TA4, power supply from 12V battery, possibility of ext. recharging the battery from a 13.8V source, placed in an ARIA cabinet with 5 cable glands, without lock Base price:	
			Four-channel evaluation unit for flow measurement, display and control	800,-
			Four-channel evaluation unit for flow measurement, KDO sensor support	1 167,-
			Surcharges for communication module, terminal board and design:	
U			Without communication module - only USB mini (IP67)	0,-
G			Internal GSM module	+ 250,-
W			Internal Wi-Fi module	+ 250,-
E			Internal Ethernet module	+ 250,-
	TB1		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, Un= Pb batt., Uext. 14-28 V (solar), IP67	+ 175,-
	TB2		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, 2x 4-20 mA, Li-Pol batt., Un=12-28 VDC	+ 196,-
	TB3		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, 2x 4-20 mA, Li-Pol batt.,Un=230VAC, IP67	+ 213,-
	TA4		IN: 8x AIN, 6x BIN, SDI-12, 2x RS485; OUT: 2x rele, Un= Pb batt., Uext. 13,8 V	+ 117,-
	TA4E		IN: 8x AIN, 6x BIN, SDI-12, 2x RS485, 2x Pt100; OUT: 4x rele, Un=Pb b., Uext.13,8V	+ 196,-
	TA5		IN: 7x AIN (1x 010V), 8x BIN, 2x RS485; OUT: 2x rele, Un= Pb battery, Uext. 13,8V	+ 117,-
		В	Only with or. TBx board, aluminum box 140x160x70 mm, 5x cable. gland, IP67	0,-
		Α	ARIA cabinet 300x200x170 mm, IP66, 5x cable gland	+ 129,-
		AZ	ARIA 300x200x170 cabinet, IP66, lockable handle, 5x cable gland	+ 138,-
		AK	ARIA 300x200x170 cabinet, IP66, portable design with 4 connectors, handle	+ 210,-
		AKZ	ARIA 300x200x170 cabinet, IP66, portable design with 4 connectors, handle, lock	+ 221,-
		S	Enclosure SCHNEIDER 400x300x200 mm, IP66, 2 loops, 5x cable gland	+ 144,-
		SZ	Enclosure SCHNEIDER 400x300x200, IP66, 2 lockable handles, 5x cable gland	+ 163,-
		N	Stainless steel cabinet 470x320x230, IP66, 2 loops, 7x metal cable gland	+ 335,-
		NZ	Stainless steel cabinet 470x320x230, IP66, 2 lockable handles, 7x metal cable gland	+ 354,-

^{(*) ...} the design of cabinets and boxes is shown on page 11 of this price list

0,-

WATER FLOW MEASUREMENT

Design for panel mounting

68,-

74,-

87,-

87,-94,-

94,-

Page 67



Stainless steel cover-holder for placing the unit on a vertical mast.

Stainless steel cover-holder for placing the unit on a horizontal boom.

Stainless steel cover-holder for placing the unit on a vertical mast, GSM antenna cover

Stainless steel cover-holder for placing the unit on a horiz.boom, GSM antenna cover

Stainless steel brackets (A2) for attaching KR2 brackets to masts, booms, railings.



Stainless steel stirrups

KR2-V

KR2-H

KR2-V-G

KR2-H-G

T1 to T2

MEASURING PARSHALL FLUMES AND SPILLWAYS



Display Description Price EUR without VAT Type

Parshall's measuring flumes



Specific Parshall flumes are among the most common blowing objects designed for measuring the instantaneous flow and flowed volumes of wastewater by measuring the level in the trough and the relevant consumption equation. The level and flow units mentioned in the previous section contain preset consumption equations for all used Parshall flumes, including combined flumes.

The advantage of Parshall measuring flumes is the fact that the overflow depth (level height) is measured in a tapering profile, where the velocity increases and the jets are more stable. Any sedimenting substances are deposited on the bottom of the riverbed before the measuring trough, and therefore this method of measurement is not usually sensitive to sedimentation and at increased flows, undissolved substances are washed away behind the Parshall flumes.

Specific Parshall flumes are used mainly in localities with a balanced range of flows. For larger flow

	rates, it is advisable to use combined Parshall flumes.	
Parshalluv zlab P1	Polypropylene Pashall flume, flow range 0.3 to 6 l / s	742,-
Parshalluv zlab P2	Polypropylene Pashall flume, flow range 0.5 to 15 l / s	921,-
Parshalluv zlab P3	Polypropylene Pashall flume, flow range 0.8 to 54 l / s	1 292,-
Parshalluv zlab P4	Polypropylene Pashall flume, flow range 1.5 to 168 l / s	2 013,-
Parshalluv zlab P5	Polypropylene Pashall flume, flow range 2.3 to 368 l / s	2 542,-
Parshalluv zlab P6	Polypropylene Pashall flume, flow range 2.9 to 598 l / s	4 104,-
	The company FIEDLER AMS s.r.o. ensures the delivery and transport of the Parshall flume from the manufacturer to the place of its installation and subsequently, after its installation, also fitting the Parshall flume with a suitable measuring technique.	
Transportation costs	Shipping costs for the Parshall flume between its manufacturer and the installation site	on request
Installation	Installation of ultrasonic sensor and flow evaluation unit	on request
		on request
W	Ultrasonic sensor holders for Parshall flumes The stainless steel trapezoidal holders DUP1 to DUP6 are placed on the leading side of the Parshall flume P1 to P6 at a distance specified by the trough manufacturer from the trough neck. The holder also includes a set of stainless steel screws for fixing the DUP holder to the top polypropylene plate of the Parshall flume. An adjustable stainless steel DU2D holder is intended for attaching the ultrasonic sensor US1200 or US3200 to the DUP holder.	
DUP1 to DUP3	The stainless steel trapezoidal holders DUP1 to DUP6 are placed on the leading side of the Parshall flume P1 to P6 at a distance specified by the trough manufacturer from the trough neck. The holder also includes a set of stainless steel screws for fixing the DUP holder to the top polypropylene plate of the Parshall flume. An adjustable stainless steel DU2D holder is intended for attaching the ultrasonic	90,-
DUP1 to DUP3 DUP4 to DUP6	The stainless steel trapezoidal holders DUP1 to DUP6 are placed on the leading side of the Parshall flume P1 to P6 at a distance specified by the trough manufacturer from the trough neck. The holder also includes a set of stainless steel screws for fixing the DUP holder to the top polypropylene plate of the Parshall flume. An adjustable stainless steel DU2D holder is intended for attaching the ultrasonic sensor US1200 or US3200 to the DUP holder.	·



DU₂D

Measuring spillways



In addition to Parshall flumes, triangular specific profiles are often used to measure wastewater flow. These profiles can also be used to measure flows and flow volumes of surface water in small streams, but mostly in combination with a rectangular or trapezoidal cross-section to achieve a larger measuring range of flow after rains. The consumption equations for calculating the instantaneous flow are already preset in the level and flow units for common specific spillway.

The construction of specific spillway on effluents from WWTPs, streams and drainage ditches so that they do not let water out of the specific cut-out requires experience and also the necessary technical equipment. Ensuring the strength of the spillway itself also places demands on its design and an important role in the whole project is the selection of a suitable place for the location of the spillway in the field

The company FIEDLER AMS s.r.o. has been involved in the construction of small spillways for WWTPs and surface water monitoring since its inception and is able to supply, install and install small spillways at its own expense with suitable technology for measuring instantaneous flows, flow volumes and possibly other water parameters (pH, conductivity, temperature,...).

Approximately, the price for the delivery and installation of a smaller spillway without fitting measuring equipment ranges from EUR 600 to 2000 without VAT depending on its size and local conditions.

Specific spillway combined

Delivery and installation of simple and combined specific spillway

Stainless steel adjustable US probe holder for DUPx holders

on request

13,-

WATER FLOW MEASUREMENT

FLOW MEASUREMENT IN OPEN PROFILE BY DOPPLER METHOD



Display Description Price EUR without VAT Type













If, for hydraulic or other reasons, a specific overflow cannot be built at the flow measurement point or a specific trough cannot be included in the water path, then the flow can be continuously calculated in a suitable recording unit in cooperation with the flow rate sensor and the level sensor. The flow rate sensor in an open profile (type KDO/S) or in a pipe type (KDO/P) uses the Doppler principle of measuring the speed of flowing water. The level can be sensed in parallel by an ultrasonic or pressure sensor. From the measured flow velocity, from the level height and from the crosssection of the specific profile, the instantaneous flow and partial accumulated flows are then calculated in the Q2/KDO or M4016/KDO unit.

Both units can measure other quantities on their unoccupied channels and transmit all measured data to the Internet. The units can also be used to control technology using external I/O modules DV2 and MAV420.



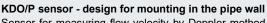


KDO / S sensor - design for sewer networks

Sensor for measuring flow velocity by Doppler method. The sensor is adapted for installation on the bottom of the sewer network. The standard supplied cable length is 10 m. The sensor can also be equipped with a hydrostatic pressure sensor, thus eliminating the need to measure the level with another sensor. Communication between the sensor and the M4016 unit takes place under a secure digital protocol via RS485 and therefore the M4016-Gx-KDO unit can be placed at a distance of up to 500 m from the sensor.

KDO/S-K0-02-030-K0
KDO/S-K0-02-010-K0
KDO/S-KP-02-030-L0
KDO/S-KP-02-010-L0
KDO/S-KP-02-030-F0
KDO/S-KP-02-010-F0

KDO sensor without hydrostatic level measurement, cable 30 m without connector 4 292,-KDO sensor without hydrostatic level measurement, 10 m cable without connector 4 227,-5 021,-KDO sensor, hydrostatic level measurement, cable 30 m without connector KDO sensor, hydrostatic level measurement, 10 m cable without connector 4 924,-5 608,-WHO sensor, hydrostatic level measurement, cable 30 m with connector and filter KDO sensor, hydrostatic level measurement, cable 10 m with connector and filter 5 544,-



Sensor for measuring flow velocity by Doppler method. The sensor is adapted for mounting in the pipe wall. The diameter of the sensor is 35 mm. The standard supplied cable length is 10 m. Communication between the sensor and the M4016 unit takes place under a secure digital protocol via the RS485 interface and therefore the M4016-Gx-KDO unit can be placed at a distance of up to 500 m from the sensor.

Ħ	KDO/P-R0-02-030-K2
Ψ	KDO/P-R0-02-010-K2
	KDO/P-R0-02-030-K3
	KDO/P-R0-02-010-K3

Pipe KDO sensor, sensor length 20 cm, cable 30 m	3 975,-
Pipe KDO sensor, sensor length 20 cm, cable 10 m	3 910,-
Pipe KDO sensor, sensor length 30 cm for application with ball valve, cable 30 m	4 275,-
Pipe KDO sensor, sensor length 30 cm for application with ball valve, cable 10 m	4 210,-











Evaluation units for KDO probes





Four-channel KDO flow meter, registration and control unit.

Measurement, display and time recording of instantaneous flow as well as daily and monthly flow volumes; data processing from KDO probe, preset consumption equations for Parshall measuring troughs and some specific overflows, possibility of table input of Level / Flow dependence; inputs for level sensors (backflow control), touch screen, IP67 protection, data acquisition and parameterization via the Internet

Q2/KDO

Unit for flow calculation using KDO sensor, various modifications

on page35

Configurati

FLOW MEASUREMENT BY SHUTTLE FLOWMETER



Display Type Description Price EUR without VAT





Tilting shuttle flow meter



PF500 is a simple pulse flow meter with a tilting double shuttle suitable for measuring flows in the range from 0 to 5 I/min. The smaller shuttle flow meter PF200 is suitable for measuring flows in the range of 0 to 2 I/min.

Mechanical design of the flow meter

The flow meters have a robust stainless steel design, a shaft also mounted in a stainless steel ball bearing, adjustable rubber feet and a pulse output formed by a switching contact of the relay.

Compatibility with FIEDLER AMS units

The flow meter can be easily connected to FIEDLER recording units equipped with a pulse input and a flow counter: H1, H2, H3, H7, H11, H40, H50, STELA, S130, M4016, Q2.

Installation and use of a flow meter



The installation of the flow meter requires a height drop of at least 250 mm at the measuring point and a directed water supply above the center of the flow meter. On the other hand, there is no need to build the usual specific overflow, including level measurement.

Because the above units can automatically transmit data to the database using the communication module, the user has access to daily, monthly and annual flow volumes, graphical and tabular data display and many other services provided by data hosting on the flowmeter manufacturer's server.

Examples of use: measurement of leaks in construction and geology, measurement of spring yield, measurement of drainage water.

PF500 PF200 Stainless steel shuttle tilt flow meter, shuttle volume 2x 500 ml, pulse output Stainless steel shuttle flow meter, shuttle volume 2x 200 ml, pulse output

517,-

ASSEMBLY FOR PERFORMING PUMPING TESTS OF DRILLED WELLS



Display Type Description **Price EUR without VAT**











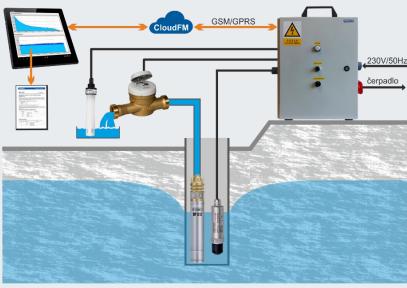








The variable measuring set enables automatic hydrodynamic tests of drilled wells autonomously and for a long time, even without the requirement for the presence of an operator at the equipment.



Constant flow or level control

The control recording unit of the assembly continuously measures the level in the well using an immersion level sensor and regulates the pump speed in the well via a frequency converter to ensure either a constant, preset flow independent of the current level in the well or maintain such a flow with pump speed pumping to maintain a constant

Data logging and remote access

The measured values of level and flow are recorded in the memory of the device, which sends them at set intervals via GSM / GPRS data transfer to the server for archiving, display and further processing, eg in a table in CSV format (Excel). The data on the server can be viewed with a common Internet browser on a PC or mobile phone.

The device can operate in automatic or manual mode.

The measured data are displayed on the color graphic touch screen of the measuring station. The device can also be set and controlled via the touch screen.

Composition of the basic assembly

- Switchboard equipped with: H3-G-TB3 control unit, ATV320U15M2C frequency converter, 230V / 16A connection for power cable, 3x400V / 16A socket for 3x400V pump, 1.5 kW, controls for manual control, connectors for level probe and water meter connection
- Water meter FLODIS 2.5-15-165-3/4 (Qn=2.5 m3/hour, DN15 L=165mm, G3/4)
- Inductive speed sensor of the CYBLE NF 001 water meter, one output, K = 1
- Immersion level sensor TSH37, range 0-40 m above sea level, cable 50 m
- Hinge for mounting the level sensor
- O2 Standard CZ SIM card long-term rental

The measuring range of the level sensor, the cable length and the type of water meter can be changed within the ordering process according to the customer's requirements.

Basic set CZ

Basic set for performing the pumping test of drilled wells

3 773,-

	Variable and optional accessories	
	Along with the basic set, other accessories and services can also be ordered	
PH485-K5M	pH probe with RS485 output (Modbus RTU / FINET), PUR cable 5 m shielded, free end	283,-
S461/LT	Optical turbidity sensor, 2 measuring ranges 010 and 0100 NTU, RS-485	1 860,-
ESV11	Conductivity and water temperature sensor, RS-485 output, FINET	808,-
Extension cable	Extension cable to level sensor or water meter, connector termination	on request
Datahosting	Server services per station and month (1 to 20 stations per user)	4,-



WATER QUALITY MONITORING



Electrochemical probes and sensors	page 41	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Optical measurement of dissolved oxygen	page 44	ن
Optical measurement of turbidity	page 45	
Display and calibration unit	page 46	

ELECTROCHEMICAL MEASUREMENTS - PH, REDOX, ISE, CONDUCTIVITY, ...



455 -

448,-

Display Type Description Price EUR without VAT

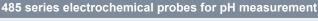












New range of pH probes with digital output RS485 / Modbus RTU.

The probes are characterized by built-in electronics in close proximity to the measuring electrode, to which the measuring and communication circuits of the probe are hermetically and inseparably connected. This solution offers very accurate measurements without the negative effects of the environment on the connector connection or on the gradual wetting of the connecting cables.

The measuring electrodes used have an extended service life of 2-3 years of operation and are characterized by a self-cleaning ability that reduces the need for recalibration.

The mechanical design of the probes is adapted for their easy and quick installation both in pipes and in open flows and sumps (2x thread 3/4 "). There is also a set of accessories available from the electrode cover KE145 through tubular sensors TS500, TS1700 with adjustable holder DE2 to connecting and extension cables.

Electrochemical probes of the PH485 series are supplied either without cable with M12 connector or with a four-core shielded PUR cable with free end for direct connection of the probe to the terminals of the measuring unit connection board, typically 5 m long, on request with any cable length. Probes with 5 m cable terminated with M12 connector are

PH485-W12
PH485-K5M
PH485-K1.7M12

pH probe with RS485 output (Modbus RTU), without cable, M12/4M connector 303,pH probe with RS485 output (Modbus RTU), PUR cable 5 m shielded, free end 305,pH probe with RS485 output (Modbus RTU), PUR cable 1,7 m, M12 / 4M connector 310,-

PH485-TS1700 pH sonda s výstup RS485 (Modbus RTU) ve snímači TS1700, PUR kabel 5 m, M12/4M

PH485-TS500 pH sonda s výstup RS485 (Modbus RTU) ve snímači TS500, PUR kabel 5 m, M12/4M



485 series electrochemical probes for measuring redox potential

New series of ORP probes with digital output RS485 / Modbus RTU.

The technical solution of these probes is identical to the PH485 type probes with the only difference that the pH electrode is replaced by a high-quality redox potential electrode with a platinum target. le. the measuring electronics is inseparably and tightly connected to the electrode and is galvanically separated from the supply voltage and the RS485 communication line to suppress ground balancing currents.

The mechanical design of the probes is adapted for easy and quick installation in pipes, open flows and sumps (2x 3/4" thread). A set of accessories is also available from the KE145 electrode housing to the TS500, TS1700 tubular sensors with adjustable DE2 bracket to connecting and extension cables

Electrochemical probes of the ORP485 series are supplied either without cable with M12 connector or with a four-core shielded PUR cable with free end for direct connection of the probe to the terminals of the measuring unit connection board, typically 5 m long, on request with any cable length. Probes with 5 m cable terminated with M12 connector are also available

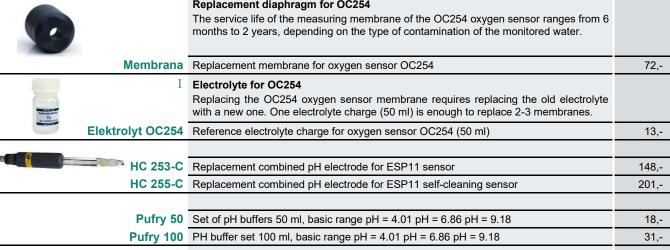
ORP485-M12 **ORP485-K5M** ORP485-K1,7M12

ORP485-TS1700 ORP485-TS500

redox probe with RS485 output (Modbus RTU), without cable, M12 4M connector	303,-
redox probe with RS485 output (Modbus RTU), PUR cable 5 m shielded, free end	305,-
redox probe with RS485 output (Modbus RTU), PUR cable 1,7 m, M12/4M connected	or 310,-
redox probe, RS485 output (Modbus RTU) in TS1700 sensor, PUR cable 5 m, M12/	/4M 455,-
redox probe, RS485 (Modbus RTU) output in TS500 sensor, PUR cable 5 m, M12/4	·M 448,-

	Accessories for XX485 series electrochemical probes	
	Replacement electrochemical probe cover The plastic cover KE145 serves as protection of electrochemical probes types XX485 against mechanical damage. The cover is made of chemically resistant Tecaform material and has an internal thread jedné "on one side, through which it is attached to the probe body. Therefore, the cover can be easily removed when calibrating or cleaning the probe.	
KE145	Plastic electrode cover for XX485 series electrochemical probes	30,-
	Tubular holder for electrochemical probes series xx485-K2M12. The stainless steel tubular holder is used to attach electrochemical probes to a designated location. The basic length of the holder is 1700 mm (500 mm). The upper end of the holder contains an M12 connector for connecting the connecting cable.	
TS1700	Tubular holder for electrochemical probes series 485, diameter 40 mm, length 1700 mm	133,-
TS500	Tubular holder for electrochemical probes series 485, diameter 40 mm, length 500 mm	125,-
	Holder for TS tube holder. The DE holder consists of two pieces so that the TS holder can be easily and quickly removed from the fixed holder and moved, for example, to an adjacent measuring well. Adjustable inclination of the TS holder.	
DE2	Stainless steel sensor holder ESKO12	85,-
T1 to T2	Stainless steel stirrups Stainless steel brackets (A2) for attaching DSPXX brackets to the mast	Page 67
M12/4F-XM	M12 connection cables for connecting probes and sensors Cables for connecting probes and sensors equipped with an M12 connector, various lengths	Page 67

		Sensors of electroch. quantities of the ES series (dis. oxygen, pH, redox)	
		Electrochemical sensors for measuring pH, dissolved oxygen or redox pot.	
		The sensor contains a replaceable sensor (electrode) and a Pt100 temperature sensor. Power supply and calibration from the unit (E2, H7, M2001-E, M4016) connected by cable via RS485, IP66 connector. The length of the sensor is selectable in the range of 50-300 cm. The standard length of the sensor for measuring dissolved oxygen is 170 cm and for measuring pH and redox potential 120 cm. The sensors have a diameter of 63 mm. A DE1 stainless steel holder with plastic handles can be ordered for the sensor.	
8	ESP11	pH meter, RS-485 output, FINET protocol	1 019,-
	ESR11	Redox meter, RS-485 output, FINET protocol	964,-
	ESK11	Oximeter, RS-485 output, FINET protocol	1 044,-
3.		Water conductivity and temperature sensor for surface flows	
15.485	•	The ESV11 sensor is designed for measuring the conductivity of water in open streams, tanks and boreholes (sensor diameter 28 mm). Power supply and calibration from the unit (E2, H7, M2001-E, M4016) connected via cable via RS485. The internal channels of the sensor contain temperature-uncompensated conductivity as well as conductivity compensated both by a constant and according to the standard for open currents. Any of the sensor's internal channels can be stored in the connected unit. The sensor has a stainless steel body with a diameter of 25 mm, stainless steel electrodes and a measuring range from 0 to 2000 $\mu\text{S/cm}^2$. The sensor is not suitable for heavily mineral waters with higher conductivity or for polluted waters, where there is a risk of clogging of the measuring electrodes by adhering grease and dirt. The IP68 protection of the sensor allows it to be submerged to a depth of up to 10 m.	
	ESV11	Conductivity and water temperature sensor, RS-485 output, FINET	808,-
		Accessories for electrochemical sensors of the ES series	
4.		Electrochemical sensor holder.	
		The holder consists of two pieces so that the sensor can be easily and quickly removed from the fixed mounting and moved, for example, to an adjacent measuring well. The inclination of the sensor in the holder is adapted to calibrate the dissolved oxygen sensor, which requires a position other than vertical so that no drop of water remains on the membrane.	
	DE1	Stainless steel sensor holder ESx11 for mounting on railings	68,-
1		Replacement sensor for ESK11 sensor Replacing the sensor in the ESK11 sensor requires a subsequent calibration of the device	
	OC 254	Replacement oxygen sensor for ESK11 sensor	222,-
0		Replacement diaphragm for OC254 The service life of the measuring membrane of the OC254 oxygen sensor ranges from 6 months to 2 years, depending on the type of contamination of the monitored water.	



ORC253-C Replacement electrode for redox potential sensor ESR11

OPTICAL MEASUREMENT OF DISSOLVED OXYGEN

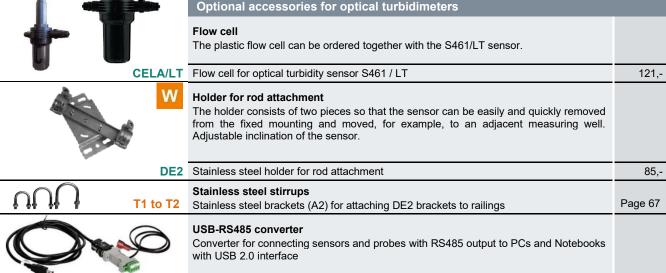


Display Ty	pe Description	Price EUR without VAT
&	Optical dissolved oxygen sensors	
RS485	Optical sensor of dissolved oxygen and water temperature	
R5485	The ESKO12 digital sensor is designed for measuring dissolved oxyguluminescence method. The optical technology used has mini requirements and due to the low drift, the sensor does not require from The sensor has a digital RS-485 output, via which it is connected to the unit or to the M4016 telemetry unit. The delivery includes a 4 m communication cable, which is terminated with a connector on the sensor and be extended up to 100 m. The sensor consists of a sensor placed in a stainless steel tube with mm with a selectable length in the range from 50 cm to 400 cm. A 1 is supplied as standard. A DE2 stainless steel holder with adjustable ordered for the sensor.	mal maintenance equent calibration. e M2001-E display (8 m) connecting sor side. The cable n a diameter of 40 70 cm long sensor
ESKO	Optical sensor of the amount of dissolved oxygen in water and tempe	rature, RS-485 1 206,-
S423/C/O	PT Suspended version of the sensor - without stainless steel tube, RS-48	35 output 1 115,-
	Optional accessories for optical oximeter Replacement head with phosphor for ESKO12 sensor Replacement head for optical dissolved oxygen sensor ESKO12 replacement head has a typical life of 1 to 3 years. Extending the possible by performing more frequent calibration of the sensor at the the head.	life of the head is
Hlavice CAF	Spare front part with luminescent target for optical sensor ESKO12	208,-
	Dissolved oxygen optical sensor holder. The holder consists of two pieces so that the sensor can be easily an from the fixed mounting and moved, for example, to an adjacent me inclination of the sensor in the holder is adapted to calibrate the dissolv which requires a position other than vertical so that no drop of wat membrane.	easuring well. The red oxygen sensor,
	E2 Stainless steel sensor holder ESKO12	85,-
∩∩∩ T1 to	Stainless steel stirrups Stainless steel brackets (A2) for attaching DE2 brackets to railings	Page 67

OPTICAL TURBIDITY MEASUREMENT



Display	Type	Description Price EUR wit	hout VAT
		Optical nephelometric NTU turbidimeters	
RS485	a c	Optical turbidity sensor ESKZ11 Ponsel The ESZK11 sensor is designed for operational measurement of turbidity in municipal and industrial wastewater treatment plants, for monitoring surface water pollution and for various industrial applications. Optional measuring range 0–50, 0-200, 0-1000 and 0-4000 NTU, possibility to calibrate the sensor using the CALSENS program and the formazine calibration solution. RS485 (Modbus RTU). The rod extension to the sensor consists of a stainless steel pipe with a diameter of 40 mm with a selectable length in the range from 500 to 4000 mm, provided with a screw connection for mounting the sensor and terminated with an IP67 connector. An extension with a length of 1700 mm is supplied as standard. A DE2 stainless steel holder with adjustable inclination can be ordered for the rod attachment.	
Ш	ESZK11	Optical turbidity sensor, 4 measuring ranges from 0 to 50, 200, 100 and 4000 NTU, RS485	2 178,-
-	TNS170/P	Rod extension for ESKZ11 sensor, length 1700 mm, dia.40 mm, connector termination	140,-
RS485	M B W	Optical turbidity sensors S461/TN and S461/LT. The S461/TN and S461/LT sensors are designed for operational turbidity measurements in municipal and industrial wastewater treatment plants, for monitoring surface water pollution and for various industrial applications. S461 / TN: Measuring range 0–1000 / 4000 NTU, operating temperature 0-50 °C, measuring accuracy ± 2.5 to 5% of range, repeatability 98%, RS485 (Modbus RTU), max. Operating pressure 4 bar S461 / LT: Measuring range 0–10 / 100 NTU, operating temperature 0-50 °C, measuring accuracy ± 1 to 5% of range, repeatability 98%, RS485 (Modbus RTU), max. Operating pressure 4 bar The rod extension to the sensor consists of a stainless steel pipe with a diameter of 40 mm with a selectable length in the range from 500 to 4000 mm, provided with a screw connection for mounting the sensor and terminated with an IP67 connector. An extension with a length of 1700 mm is supplied as standard. A DE2 stainless steel holder with adjustable inclination can be ordered for the rod attachment.	
Ш	S461/TN	Optical turbidity sensor, 2 measuring ranges 01000 and 04000 NTU, RS-485	2 868,-
	S461/LT	Optical turbidity sensor, 2 measuring ranges 010 and 0100 NTU, RS-485	3 033,-
	TNS170/CH	Rod extension for S461 sensor, length 1700 mm, dia.40 mm, connector termination	151,-
4		Optional accessories for optical turbidimeters Flow cell The plastic flow cell can be ordered together with the S461/LT sensor.	



USB / RS-485 converter for parameterization and calibration of sensors

DISPLAY AND CALIBRATION UNITS FOR WATER QUALITY SENSORS



Display	Type	Description Price EUR	without VAT
MoSt B	W	Unit designed for sensors pH, redox, O2, conductivity, turbidity,	
USB 2G		E2 Dual-channel display, calibration and control unit	
E2 COOL FINDLER 2.62-y		Display and record of signal from one to two connected sensors of dissolved oxygen, pH, REDOX potential, turbidity, conductivity, ISE voltage and temperature; one or two-point calibration, two PID controllers, self-diagnostics, color touch screen, IP67 protection, data acquisition and parameterization via the Internet (only E2-G), Al box.	
MENN A MOOR EXC		Inputs: 2x RS485, 4x 4-20 mA, 2x pulse input	
		Outputs: 2x switching contact of relay 6A / 250V; 2x solid state relay 0/12 V DC, 2A 2x active galvanically isolated current output 4-20 mA The E2 unit can be ordered with/without a GSM built-in modem and with different types of connection plate and cover box (similar to the variants of the H3, H7, Q2 units). Some of the possible configurations are listed in the following price list:	
E2-l	U-TB1	Display, calibration and control unit, 12-28 V DC power supply	925,-
E2-l	U-TB2	Display, calibration and control unit, 24 V DC power supply	946,-
E2-l	U-TB3	Display, calibration and control unit, 230 V AC power supply	963,-
E2-U-TA	44-AK	Display, calibration and control unit, 12 V DC power supply, Aria with connectors	1 077,-
E2-U-TA	A4-AZ	Display, calibration and control unit, 12 V DC power supply, Aria with lock	1 004,-
E2-U-	TA5-P	Display, calibration and control unit, 12 V DC power supply, in panel	867,-
E2-0	G-TB1	Display, calibration and control unit, GSM module, power supply 12-28 V DC	1 175,-







E2-G-TB1-SZ

E2-G-TB2-AZ

E2-G-TB2-SZ

E2-G-TA4-SZ

E2-G-TB2

E2-G-TB3

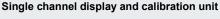
Other units for pH, redox, O2, conductivity, turbidity,... sensors

Display, calibration and control unit, GSM module, 230 V AC power supply

Display, calibration and control unit, GSM module, 24 V DC power supply







Display and timing of signal from connected sensor of dissolved oxygen, pH, REDOX potential, turbidity, conductivity, ISE voltage and temperature; one or two-point calibration, large two-line display.

Display, calibration and control unit, GSM module, pow.supply 12-28 VDC, enclosure

Display, calibration and control unit, GSM module, 24 V DC power supply, enclosure

Display, calibration and control unit, GSM module, 24 V DC power supply, enclosure

Display, calibration and control unit, GSM module, 12 V DC power supply, enclosure

Supply voltage 8-24 VDC, overvoltage protection of inputs and outputs Outputs: 3x relay 6A / 250V (alarm, limit, sampler), active current output 4-20 mA.

M2001-E Calibration and display unit for electrochemical sensors, 3x relay, 1x out 4-20mA 702,-Calibration and display unit for electrochemical sensors, 3x relay, 2x out 4-20 mA 773,-M2001-E/T













H3-

H7-

Multichannel display, calibration and control unit, flow meter.

Display and timing of signal from connected sensors of level, flow, dissolved oxygen, pH, REDOX potential, turbidity, conductivity, ISE voltage and temperature and many other variables; up to 96 measuring recording channels and 208 binary recording channels, one or two-point calibration, four PID controllers, self-diagnostics, color touch screen, IP67 protection, data acquisition and parameterization via the Internet

Multichannel recording, calibration and control unit, flow meter, variants. power supply Multichannel recording, calibration and control unit, flow meter, variants. power supply

Configuration p.3

1 338,-

1 196,-

1 333,-

1 358,-

1 213,-

1 279,-

		Optional accessories for display and calibration units	
		Cover-holder for H7, E2 and Q2 units Stainless steel cover of the unit, which also serves as a holder for this unit. The cover is attached to the vertical or horizontal boom using brackets T1 to T2.	
	KR2-V	Stainless steel cover-holder for placing the unit on a vertical mast.	87,-
	KR2-H	Stainless steel cover-holder for placing the unit on a horizontal boom.	87,-
	KR2-V-G	Stainless steel cover-holder for placing the unit on a vertical mast, GSM antenna cover	94,-
	KR2-H-G	Stainless steel cover-holder for placing the unit on a horizontal boom, GSM ant. cover	94,-
$\overline{\Omega}$	T1 to T2	Stainless steel stirrups Stainless steel brackets (A2) for attaching KR2 brackets to masts, booms, railings	Page 67
The Case of the Ca		Cover-holder for M2001 unit The stainless steel cover of the M2001 unit against weather conditions, which also serves as a holder for this unit	
00	KR1	Stainless steel cover-holder for outdoor placement of the M2001 display unit.	68,-
		Secondary current output to M2001 Plug-in module for generating a 4-20 mA secondary current output on the M2001. The output is active and is galvanically isolated from the M2001 supply voltage, as is the primary standard 4-20 mA current output. The secondary current output is usually intended for transmitting the water temperature (M2001 E) to the higher-level control system.	
	MAV420/M	4-20 mA secondary analog output module to M2001 unit	74,-
	M12/4F-XM	M12 connection cables for connecting probes and sensors Cables for connecting probes and sensors equipped with an M12 connector, various cable lengths	Page 65



METEOROLOGICAL SENSORS AND STATIONS



Rain gauges and rain gauge stations	page 49	1,1,1
Temperature and heat flow sensors	page 51	
Solar radiation sensors	page 53	<u> </u>
Humidity, temp. and air pressure sensors	page 54	
Wind speed and direction sensors	page 55	وا
Soil moisture sensors	page 56	
Meteorological stations	page 57	
Evaporation measurement	page 59	1112

PRECIPITATION GAUGES AND PRECIPITATION GAUGES



Display	Туре	Description Price EUR with	out VAT
,			.Juc TAI
	W	Shuttle rain gauges	
	W	Mechanically resistant shuttle rain gauge with a collection area of 500 cm2 and a resolution of 0.1 mm precipitation / pulse. The cover and the collecting surface of the rain gauge are made of metal, only the base carrying the tilting shuttle and possibly also the heating elements in the version for year-round operation (SR03 / V) is plastic.	
		A stainless steel stand S301 can be ordered together with the rain gauge, which after installation ensures that the upper edge of the rain gauge is at the usual height of 1 m above the ground.	
	SR03	Shuttle rain gauge, resolution 0.1 mm / pulse, collection area 500 cm2	934,-
	SR03/V	Heated shuttle rain gauge, resolution 0.1 mm / pulse, collection area 500 cm2	1 169,-
	S301	Stainless steel stand under the SR03 rain gauge, without concrete tiles	107,-
	W	Mechanically resistant shuttle rain gauge with a collection area of 200 cm2 and a resolution of 0.2 mm precipitation / pulse. The cover and the collecting surface of the rain gauge are made of metal, only the base carrying the tilting shuttle and possibly also the heating elements in the version for year-round operation (SR02 / V) is plastic. A stainless steel stand S201 can be ordered together with the rain gauge, which after installation ensures that the upper edge of the rain gauge is at the usual height of 1 m	
		above the ground.	
	SR02	Shuttle rain gauge, resolution 0.2 mm / pulse, collection area 200 cm2	800,-
		Heated shuttle rain gauge, resolution 0.2 mm / pulse, collection area 200 cm2	921,-
	S201		98,-
		0 0 1	
	/	The crown prevents the birds from sitting on the edge of the rain gauge and thus clogs the drain hole of the rain gauge with their faeces. The crown is fixed to the upper edge of the rain gauge by means of a tightening screw connection. Material: stainless steel.	
	Korunka-02	Protection against birds - attachment for rain gauge SR02	49,-
	Korunka-03	Protection against birds - attachment for rain gauge SR03	58,-
SO THEOLER X	W	Heating regulator for rain gauge SR03/V The RT-03 heating controller maintains the temperature in the upper and lower sections of the SR03/V rain gauge at the required values and also monitors faults. Failure of the supply voltage for heating or failure of the temperature sensor can be detected at the galvanically isolated outputs of the controller. A separate galvanically isolated output with a pulse extension to 100 mS is assigned to the output pulses of the rain gauge. RS485 output of the controller can be used for monitoring the temperatures of the upper and lower heating section and for recording faults using a connected recording unit (M4016, H1,)	
	RT-03	Replacement two-circuit heating controller for rain gauge SR03 / V, RS485 output	175,-
		Concrete tiles	
	BETON	Concrete tile for mounting the stand S301, S201, weight 60 kg	24,-
R CC TOP T		Mains switchboards with source for heated rain gauges Surge protection and safety switchboard installed in places with older electrical installation without surge protection. In addition to protections and fuses, the switchboard also contains one or more mains sources for powering the M4016 recording unit (H1, H2, H3, H7, STELA-3,) and for heating the SR02 / V or SR03 / V rain gauge. Protection: IP54.	
Ro	zvodnice R3	Switchboard, power supply DRC-138/30W, power supply for heated rain gauge SR03/V	333,-
	zvodnice R2	Switchboard, source DRC-138/30W, source for heating rain gauge SR02/V	351,-
D	RC-24/100W	External switching power supply DELTA, output 24 VDC/100W /3.8 A, (width 6 modules)	60,-

934,-107,-

942.-

933,-









Rain gauge assemblies

The warning rain gauge station consists of a rain gauge, the appropriate stainless steel stand of the rain gauge and some telemetry unit STELA, H1, H3, H7, Q2 or M4016-SR, which provides rainfall recording, calculation of set moving totals of precipitation for selected time period and transmission of measured data to server and sending warning SMS about exceeding the precipitation totals for the set period to selected telephone numbers from the station directory.

For year-round operation of the station, a heated version of the rain gauge can also be used when building a rain gauge station. In such a case, however, it is necessary to have a source of mains voltage at the place of installation of the rain gauge station (heating of the rain gauge cannot be operated from the battery).

Other measured quantities can be stored on the free channels of the telemetry station, for example soil moisture measured by VIRRIB sensors, the amount of suction soil pressure measured by the soil strain gauge or soil and air temperatures, etc.

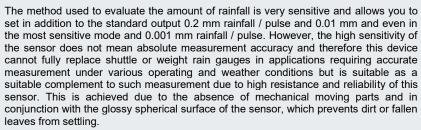
The software of the telemetry station allows to set the pulse weight with an accuracy of 0.001 mm. This can be used to quickly and easily recalibrate the rain gauge station by accurately measuring the weight of the pulse from a known amount of water and the actual number of pulses measured..

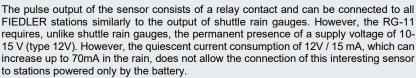
SR03	Shuttle rain gauge, resolution 0.1 mm / pulse, collection area 500 cm2	
S301	Stainless steel stand under the SR02 rain gauge without concrete tiles	
SER H1	Small telemetry station in GSM / GPRS network	
LA-3A	Small telemetry station, 2 batteries, metal housing, IP66 protection.	

HYDRO-LOGGER H1 STELA-3A

RG-11 Rain gauge - rain intensity detector

RG-11 is an optical rain gauge with pulse output, simple mechanical construction and sophisticated software. The principle of measuring precipitation is based on the continuous evaluation of 4 reflected light rays from water-soaked transparent spherical cover of a sensor with a diameter of 70 mm.





In addition to the pulse output, the user-adjustable sensor mode also allows a permanently closed contact in the rain (adjustable intensity for contact closing), detection of condensed water and icing on the sensor surface, irrigation control and detection of drops, ie leakage. The mode and its parameters are selected by switches inside the

RG-11	Optical rain intensity detector with pulse output	187,-
DRG-11	Stainless steel holder for optical rain gauge RG-11, boom 250 mm	16,-



T1 to T2

Stainless steel stirrups

Stainless steel brackets (A2) for attaching radiation shields to the mast

Page 67







Rain detector with capacitive sensor

Rain detector with durable corundum capacitive sensor, microprocessor-controlled sensor heating (heating only in rain, keeping the corundum sensor temperature set above the ambient temperature), detector output open collector (ON .. rain, OFF ... no rain) and serial bus RS485 for parameterization and reading of the approximate intensity of rain 0 to 100%, FINET and MODBUS RTU communication protocols via RS485, adjustable delay for switching on / off the output, supply voltage 12 to 24 V DC, stainless steel holder for mounting the detector on a pole or vertical wall.



RDH11 Rain detector with controlled heating, capacitive ceramic sensor, OK and RS485 output

TEMPERATURE AND HEAT FLOW SENSORS



Display Type	Description Price EUR with	hout VA
BW	Temperature sensors	
	Temperature sensor with Pt100 sensor	
	The stable and high-precision Pt100 resistance sensor - accuracy class A - is hermetically encapsulated in a stainless steel housing with a diameter of 7 mm.	
	The four-wire PUR cable with a diameter of 4 mm allows the connection of the sensor to the temperature inputs of the DPD-III connection board of the M4016 unit as well as to the TEP-06 / S converter at a distance of up to 50 m without affecting the measurement accuracy. In places with the presence of mains or other industrial interference, it is advisable to use a shielded connection cable.	
PT100-KP	Pt100 sensor, class A, stainless steel housing diameter 7 x 35 mm, price without cable	25
PT100-DP	Pt100 sensor, class A, stainless steel housing diameter 10 x 75 mm, price without cable	29
PT100-CU	Pt100 sensor, class A, nickel-plated. copper case 8x8x30mm, magnet, price without cable	4
	Temperature sensor with Pt100 sensor and screw connection	
\$4	The stable and high-precision Pt100-A resistance sensor is hermetically encapsulated in a stainless steel housing with $\frac{1}{2}$ "screw connection. This robust mechanical design allows the temperature sensor to be installed in a pipe or tank weldment.	
	The cable connection can be made with a four-core cable without shielding or with shielding according to the place of use of the sensor.	
Pt100-SP	Pt100 sensor, class A, housing with ½" thread, four-wire connection, price without cable	6
Kabel Pt100	Price for 1 m of PUR cable 4x0.14	2
Kabel Pt100-ST	Price for 1 m of PUR shielded cable 4x0.14	:
₿	Temperature sensors with RS485 output	
18485	Temperature probes with integrated Pt100 class A resistance sensor. Depending on their design, the probes are suitable for measuring water or air temperature. The TEP1/H probe for measuring the water temperature is suitable for permanent immersion of the probe in the measured water and has a non-removable PUR communication cable with the required length from 5 to 30 m - the standard length of 5 m is included in the price of the probe. The design of the TEP1/K probe with an M12 connector for connecting a PUR cable is intended for measuring the air temperature. This probe can be ordered including the radiation cover - TEP1/K/RK.	
	The RS485 output signal under the FINET (MODBUS RTU) protocol can be transmitted over long distances of up to 200 m. High accuracy and stability is achieved by electronic calibration without the presence of trimmers and other unstable elements. The probes have a standard resolution of 0.01 °C.	
TEP1/H	Immersion probe for measuring water temperature (0°C+50°C), Pt100-A sensor, RS485	125
TEP1/K	Probe for measuring air temperature (-40°C +60°C), Pt100-A sensor, RS485 output	134
TEP1/E	Converter for external Pt100 sensor (end M12), range -40°C +100°C, RS485 output	125
	7. 3	



Converters for temperature sensors with RS485 output

Converter 6x temperature-RS485, fixed cable connection, IP68 Accurate measuring converter with permanently connected Pt100 temperature sensors via PUR cables with a selectable length from 1 m to 30 m. The mechanical design enables permanent operation of the converter even under water, connection to the M4016 station via RS-485 protocol FINET or Modbus RTU. When ordering, it is necessary to specify the length and number of cables with PT100 temperature sensors.

These are not included in the price of the converter.

Converter temperature-RS485, wired Pt100 sensors, IP68, cable 5 m 218,-

Converter 6x temperature-RS485 by connecting Pt100 sensors to the terminals Converter equipped with terminals for four-wire connection of up to 6 Pt100 temperature sensors. The basic offer of the converter does not include cables with Pt100 sensors (recommended type: PT100xM). The probes have a standard resolution of 0.01 °C. Converter temperature-RS485, connection of sensors Pt100 to terminals, cable 1 m 236,-TEP06/S Kabel Pt100 Price for 1m unshielded PUR cable to converter TEP06, /S, TEP01, TEP01/K



N Heat flow sensor

Radiation shield

cable lengths

Sensor for measuring the heat flow in the soil or the heat flow passing through building structures.

The sensor converts thermal energy into electrical energy using a series of thermocouples that measure the differential temperatures of the surfaces of the ceramic-plastic body. The output signal of the HFP01 is a small DC voltage proportional to the heat flux and the sensor does not need any external power supply for its operation. The polarity of the output voltage determines the direction of the heat flow. Typical sensor sensitivity: type sensitivity 60 uV / W/m2.

HFP01-05

Hukseflux heat flow sensor, 5 m cable

630,-

104,-



Accessories for temperature sensors

Radiation cover to protect the sensor or measuring probe from direct radiant radiation.

The radiation cover is made of UV-resistant and mechanically strong plastic. The delivery also includes a stainless steel holder adapted for mounting the radiation cover on the wall or with the help of brackets on a vertical mast or boom.

The mounting sleeve allows the insertion of either Pt100 temperature sensors (PT1000) or probes of the TEP1 or RVT81 type, or ATM01, into the body of the radiation cover. Dimensions: cover diameter 146 mm, height without stainless steel holder 110 mm, 5, 7,

Dimensions: cover diameter 146 mm, height without stainless steel holder 110 mm, 5, 7 9 or 11 shielding slats.

Radiation cover for temperature sensor - 5 blades, stainless steel holder

RK7 Radiation cover for temperature sensor - 7 blades, stainless steel holder 125,RK9 Radiation cover for temperature sensor - 9 blades, stainless steel holder 146,RK11 Radiation cover for temperature sensor - 11 blades, stainless steel holder 167,-



M12 connection cables for connecting probes and sensors

Cables for connecting probes and sensors equipped with an M12 connector, various Page 65



MINILOG

Accurate temperature recorder



MINILOG - data logger for long-term and accurate temperature recording

Datalogger with large data memory capacity, 1 to 6 inputs with Pt100 sensors at the ends of the PUR cable, cable length to the sensor 1 m to 40 m, very accurate temperature measurement.

A series of data loggers MINILOG-1 to MINILO-6 divided according to the number of temperature sensors $\,$

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Display	Type	Description Price EUR wi	ithout VAT
		Pyranometers	
*	W	Pyranometer requiring supply voltage Pyranometer - a global radiation sensor. Supply voltage 5 to 12 V DC, measuring range 0 - 1200 W/m², spectral range 0.3 to 3 μm. the 0-2 V output signal can be processed by a DPD-III connection board or with a modified range of the TEP06 converter.	
	SG002	Pyranometer, 0-2 VDC output	665,-
		Holder for a pair of SG002 pyranometers	79,-
	W B M	Pyranometers - global radiation sensors from the world manufacturer Kipp & Zonen. Output signal in μ V/W/m², measuring range 0 - 2000 W/m², spectral range 0.31 to 2.80 μ m. The delivery includes a 5 m cable terminated on the pyranometer side with a connector. The output signal from the pyranometer can be processed by one of the two special inputs to the TEP06/P converter.	
Z V	CMP3	Kipp & Zonen pyranometer, temperature error in the range -10 °C to +40 °C <5%.	1 033,-
0	CMP6	Kipp & Zonen pyranometer, temperature error in the range -10 °C to +40 °C <4%.	on reques
	CMP11	Kipp & Zonen pyranometer, temperature error in the range -10 °C to +40 °C <1%.	on reques
	Albedo-CMP3	Holder for a pair of CMP3 pyranometers.	113,-
	CMP3 kabel 6M	Shielded PUR cable 6 m with connector for CMP3 sensor connection, one free end.	41,-
	W B	NR Lite2 is designed to measure the resulting radiation, which is obtained by one sensor as the difference between incoming and reflected radiation from the earth's surface. The output signal of the sensor is generated by the thermoelectric voltage of a special Teflon sensor, which is proportional to the measured resulting radiation. Spectral range 200 to 100,000 nm, typical sensitivity 10 µV/W/m². The delivery includes a 15 m cable.	
	NR LITE2	Net radiometr Kipp & Zonen	1 800,-
	W B M	The Net Radiometer CNR4 consists of a pair of pyranometers for measuring short-wave incident and reflected radiation and a pair of pyrgeometers for measuring long-wave infrared incident and reflected radiation. In addition, the sensor is equipped with a Pt100 temperature sensor to record the parallel temperature of the sensor and a heating resistor to remove condensation drops on the sensors. The spectral range of shortwave sensors is 300 to 2,800 nm, typical sensitivity 5 to 20 μ V/W/m². The spectral range of longwave sensors is 4,500 to 42,000 nm, typical sensitivity 5-20 μ V/W/m². Nonlinearity <1%, temperature error in the range -10 °C to +40 °C is <5%, weight 850 g, working temperature -40 °C to +80 °C Included is a 10 m cable.	
	CNR4	Combined sensor with pyranometers and pyrgeometers from Kipp & Zonen	7 442,
	CNF4	Ventilation unit for CNR4 sensor, 10 m cable	1 854,-
	B W	Accessories for Net radiometers and pyranometers	
RS485	A FEATURE MANAGEMENT	Converter 4x μ V + 2x Pt100 / RS485 TEP06/P is a measuring converter adapted for connection of up to 4 voltage outputs of pyranometers and pyrgeometers, which it converts to a digital signal accessible on the RS485 bus (FINET or Modbus RTU). In addition, the transmitter contains 2 inputs for Pt100 temperature sensors. In addition to 4 analog voltage channels and two temperature channels, it is possible to obtain from this transducer on a separate measuring channel also the 4th power of the metal body temperature of the CNR4 radiometer, which is needed for correct calculation of longwave radiation intensity of pyrgeometers. The delivery of the measuring amplifier includes a communication PUR cable.	
	TEP06/P	Converter for connection of 2 pyranometers, 2 pyrgeometers and 2 Pt100, output RS485	260,-
	W	Robust stainless steel holder DNR2 is a universal stainless steel holder designed for fast and stable installation of a pyranometer or Net radiometer on a vertical mast. The holder is installed using stainless steel brackets T1 to T2 and allows you to set the horizontal working position of the device	

steel brackets T1 to T2 and allows you to set the horizontal working position of the device

DNR2 Holder for installation radiometers on a mast with a diameter of up to 30 to 60 mm

METEOROLOGICAL SENSORS AND STATION

80,-

in two planes.

RELATIVE HUMIDITY, TEMPERATURE AND AIR PRESSURE SENSORS



Display Typ	e Description Price EUR wit	thout VAT
(4) B	B W Humidity and air temperature sensors	
R\$485	Relative humidity and air temperature sensor for common applications Modern relative humidity sensor without the need for calibration. Measurement accuracy ± 1.8% RH in the range from 10 to 90% RH. The air temperature is sensed by a separate Pt100-A sensor with very low temperature inertia. The probes have a standard resolution of 0.1% RH and 0.01 °C.	
	The probe contains a digital RS485 output and communicates with the superior recording unit using the FINET or MODBUS RTU protocol	
RVT	Relative humidity and air temperature sensor (SHT sensor), RS485 output	162,-
RVT	Relative humidity and air temperature sensor (Pt100 sensor), RS485 output	185,
RVT80/RI	Sensor rel. humidity and air temperature (SHT sensor), RS485 output, radiation cover	251,
RVT81/RI	Sensor rel. humidity and air temperature (Pt100 sensor), RS485 output, radiation cover	274,-
B N	Highly accurate sensors for measuring relative humidity and air temperature The relative humidity and air temperature sensors RVT12/RK7 and RVT13/RK7 use highly reliable, accurate and stable HydroClip2 probes from the Swiss company ROTRONIC for measurement- measurement accuracy: ±0.8% RH, ±0.1°C in the entire measuring range. The RVT12 sensor requires a 3.3V supply voltage and has two voltage outputs 0 to 1V. The RVT13 sensor has its own microprocessor for communication with the connected recording unit via RS485 (FINET, Modbus RT) and the supply voltage can be in the range of 5 to 14 V DC. The probes have a standard resolution of 0.1% RH and 0.01 °C.	
RVT12/RI	Precision sensor rel.humidity and air temperature, 3.3V supply,2x output 0-1 V, rad. cover	634,-
RVT13/R	Precision sensor rel.humidity and air temperature, RS485 output, radiation cover	661,-
RVT13/R	7 Precision sensor rel. humidity and air temperature, RS485 output, radiation cover	679,-
& B V	Atmospheric air pressure sensor - barometer	
V.E. (2001 role v.2012 Un: 12-15 VOC/A/A	Accurate atmospheric air pressure sensor The sensor contains a temperature-compensated sensor that allows the measurement of atmospheric pressure in the range of 300 to 1100 mbar and a maximum measurement error of <0.5 mbar for 25 °C and <1 mbar in the range of 0 to 50 °C. The sensor communicates with the unit via the RS485 interface under the FINET protocol	
	The mechanical design of the sensor allows its placement in the radiation cover RK5 or in the cable gland of the telemetry station.	
ATN	10 Atmospheric air pressure sensor, RS485 output	241,-
ATM	11 Atmospheric air pressure and air temperature sensor (Pt100 sensor), RS485 output	263,-
	Replacement sensors and accessories for humidity, temp. and air pressure Replacement sensor for sensors RVT80, RVT81	probe
	Replacement relative humidity and air temperature sensors for sensors RVT80, RVT81. The sensor is equipped with a connector for easy replacement in the sensor directly in the field. The SHT sensor was calibrated during production and the calibration constants were stored in the sensor's memory - the achieved measurement accuracy is thus better than ±1.8% RH and ±0.3 °C at 25 °C.	
SHT8	Replacement sensor with reduction for RVT80 and RVT81	71,-
	Replacement sensor for RVT12 and RVT13 sensors Replacement very accurate and stable sensor of relative humidity and air temperature for RVT12 and RVT13 sensors. The sensor is equipped with a connector for easy replacement in the sensor directly in the field. The sensor was calibrated at the factory and the calibration constants were stored in the sensor chip. Thus, an excellent measurement accuracy of \pm 0.8% RH, \pm 0.1 °C was achieved.	
HC2-	Replacement sensor with connector for RVT12 (/ RK5) and RVT13 (/ RK5) sensors	427,-
∩∩∩ T1 to	Stainless steel stirrups Stainless steel brackets (A2) for attaching the WH700 bracket to the mast	Page 67
	M12 connection cables for connecting probes and sensors	

2 384,-2 826,-

1 658.-

Page 67

55,-

WIND SPEED AND WIND DIRECTION SENSORS - ANEMOMETERS



Display Type	Description Price EUR wit	hout VAT
७ B W	Rotary sensor of wind speed and direction	
TEMPORARILY UNAVAILABLE	Durable propeller anemometer with evaluation of wind gusts All-metal robust anemometer design suitable for mountain environments, ceramic bearings, very low current consumption - sensor adapted for battery-powered assemblies, RS485 output (Modbus RTU, FINET - average and instantaneous wind speed, max. Wind gust) and the possibility of secondary output pulses or voltage 0-1 V DC, power supply 5 to 24 VDC. Installation on a vertical mast (mast) with a diameter of 30 to 33 mm.	
WS10	All-metal anemometer, RS485 output, Un = 5 to 24 V DC	694,-
WS103-	All-metal anemometer, controlled heating 12 V DC / 5W, RS485 output	761,-
TEMPORARILY UNAVAILABLE	Robust wind direction sensor with evaluation of the average wind direction All-metal robust design of the wind direction sensor suitable for mountain environments, direction resolution 1° - magnetic position sensing method, very low current consumption - sensor adapted for battery-powered assemblies, RS485 output (Modbus RTU, FINET - average and instantaneous direction value) and secondary output 0-1 V DC, power supply 5 to 24 VDC. Installation on a vertical mast (mast) with a diameter of 30 to 33 mm.	
WD36	All-metal rudder, RS485 output, Un = 5 to 24 V DC	513,-
WD360-	All-metal rudder, controlled heating 12 V DC / 5 W, RS485 output	581,-



Ultrasonic sensors of wind speed and direction

Precise ultrasonic 2D anemometer

A wind speed and direction sensor that uses the Doppler principle for measurement. The sensor is connected to FIEDLER telemetry and recording units via the RS485 interface under the Modbus RTU protocol (4-20 mA variant). The sensor also provides air temperature at its outlet. The sensor operates in the range 0..75 m / s and 0..359 $^{\circ}$. A sensor variant with a working range of 0..85 m / s or 0..100 m / s is available on request.

The construction of the sensor is made of durable and stainless materials without moving parts. High measurement accuracy \pm 1.5% of the measured value was achieved by optimizing the aerodynamic parts of the sensor with a minimum of turbulence on the ultrasonic sensors

UA4310 Precise ultrasonic sensor of wind speed and direction 0..75 m / s, Modbus RTU on RS485

UA4310-H Precise ultrasonic sensor of wind speed and direction 0..75 m / s, built-in heating



Universal 2D ultrasonic anemometer

A wind speed and direction sensor that uses the Doppler principle for measurement. The sensor connects to FIEDLER telemetry and recording units via RS485 interface under Modbus RTU protocol (variant SDI-12). The sensor operates in the range of 0..75 m/s and 0..359°.

The construction of the sensor is made of durable materials with no moving parts. The sensor achieves excellent accuracy of $\pm 3\%$ of the measured value at wind speeds up to 35 m/s. For higher speeds the accuracy drops to $\pm 5\%$. The resolution of the sensor reaches 0.1 m/s and 0.1°.

WS200 Ultrasonic wind speed and direction sensor 0..75 m/s

M12/8-10M-WS200 10 m cable with M12 connector for connection to WS200 sensor, free end



Accessories for wind speed and direction sensors

Combined stainless steel holder for WS103 and WD360 sensors Metal stainless steel boom adapted for joint installation of WS103 (-H) anemometer and WD360 (-D) rudder on a mast with a diameter of 50 to 60 mm, span 700 mm, removable

atmospheric surge arrester, installation on the mast using two 1½" or 2" clamps.

WH700 Stainless steel boom for joint installation of wind speed and direction sensors, mast mount 110,-

M12/4F-XM

Stainless steel stirrups
Stainless steel brackets (A2) for attaching the WH700 bracket to the mast

M12 connection cables for connecting probes and sensors
Cables for connecting probes and sensors equipped with an M12 connector, various cable lengths

SOIL HUMIDITY SENSORS



Display	Type	Description Price EUR w	ithout VAT
	W	Volumetric soil moisture sensors	
		VIRRIB soil moisture sensors	
		Volume soil moisture sensor in the range from 5% to 50%, current output 0-5 mA. For the correct function of the sensor, it is necessary to operate the measuring system in the economical intermittent mode of operation (standard operation of all FIEDLER telemetry stations). Analog output connectable to H1, H3, H7, H40, STELA, M4016 and Minilog units.	
	VIRRIB	Volume soil moisture sensor, current output 0-5 mA, rectangular design	108,-
W	W B M	Soil moisture sensors from Campbell Scientific Volumetric soil moisture sensor in the range from 0% to 100%, soil temperature, conductivity and soil permittivity. Typical measurement error ± 3% soil moisture and ±0.5 °C. Digital output SDI-12 connectable directly to units H3, H7, H40, STELA or M4016. Supply voltage 6-18 V.	
	CS650	Soil moisture and temperature sensor, SDI-12 output, cab. 3 m, measuring tips 30 cm	438,-
	CS650-5M	Soil moisture and temperature sensor, SDI-12 output, cab. 5 m, measuring tips 30 cm	442,-
	CS655	Soil moisture and temperature sensor, SDI-12 output, cab. 3 m, measuring tips 12 cm	438,-
	CS655-5M	Soil moisture and temperature sensor, SDI-12 output, cab. 5 m, measuring tips 12 cm	442,-
	W	Set for measuring suction pressures in the soil The set for measuring suction pressures in the soil consists of 1 to 4 soil tensiometers TMS11A and the evaluation module TM4 Soil tensiometer TMS11A Temperature compensated absolute pressure sensor, measuring range -85 kPa to +30 kPa, ceramic head diameter 25 mm, optional strain gauge length from 20 cm to 100 cm, connection cable 3 m long terminated with M12 connector, stainless steel capillaries for filling the soil tensiometer without removing it from soil, ceramic head material - sintered corundum, tensiometer body made of Tecaform.	
	TMS11A	Temperature compensated soil tensiometer, connection to the TM4 measuring module	288,-
RS485	W	Measuring module TM4 for soil tensiometer TMS11A The TM4 module corrects the absolute pressure obtained from the soil tensiometer by the value of the atmospheric air pressure. The atmospheric air pressure sensor is located in the TM4 module. The resulting calculated vacuum-overpressure in the soil is transmitted to the connected recording unit (datalogger) via the RS485 bus. Up to 4 TMS11A soil tensiometer can be connected to one TM4 module via M12 connectors. Supply voltage 6 to 14 V DC / 5 mA.	
TM4 Mode		Module for connection of 4 TMS11A, calculation of suction pressure, RS485-Modbus	290,-
		Accessories for soil moisture sensors Stainless steel stirrups	
tit if t	T1 to T2	Stainless steel brackets (A2) for attaching the TM4 bracket to the mast	Page 67

METEOROLOGICAL STATIONS



Display Type Description **Price EUR without VAT**











Variable weather stations

Measuring stations.

Telemetry units H3, H7 and M4016 are suitable for meteorological stations, which contain an accurate analog signal converter and thus guarantee reliable measurement of output signals of many different probes and sensors. Because these units also have a digital RS485 and SDI-12 interface, virtually all commonly available meteorological sensors and transducers can be connected to them.

For a small weather station with a smaller number of probes and sensors, a simpler H1 or H2 unit can be used.

Low current consumption of used telemetry units, controlled power supply of connected sensors and data transmissions to the server allow to permanently operate the station with only a small solar panel or completely without external charging with only occasional replacement of the power battery.

Wide range of professional sensors

When assembling a meteorological station, you can choose from a wide range of sensors and measuring probes listed in this overview price list, as well as from the offer of many other renowned manufacturers.

Example of a universal weather station set:

Measuring control panel: H7-G-TA4-NZ in stainless steel cabinet with lock, SIM Power supply system: solar panel 10W, battery 12 V/42 Ah, RS13 controller Moss construction: stainless steel mast 3 m with anchorage, booms for sensors Measuring rain precipitation: rain gauge SR03 with stand S301 and concrete plinth Temperature and humidity: (0.3 m and 2 m above the ground): 2x RVT13 / RK5 Measurement of air pressure: sensor ATM11

Wind speed and direction measurement: WS103, WD360 + holder WH700 Measuring global radiation: pyranometer CMP3 + converter TEP06 / P

Weather station

Approximate price of the station according to the above overview, cable connections

7 500,-

2 500,-



Example of a set of a small weather station:

Measuring control panel: H1-G-AZ in ARIA cabinet with lock, global SIM Power supply system: solar panel 10 W, battery 12 V / 9 Ah, RS13 controller Moss construction: hot-dip galvanized mast 2 m, booms for sensors Measuring rain precipitation: rain gauge SR02 with stand S201 and concrete plinth Temperature and humidity measurement 2 m above the ground: RVT81/RK5

Small weather station Approximate price of the station according to the above overview, cable connections











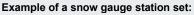
Measurement of height and water value of snow cover

Snow gauge stations have, among other sensors, ultrasonic snow cover height sensors and usually include a cushion for measuring the water value of the snow cover.

Measuring the water value of snow cover

The water value of the snow cover is measured by means of a hydrostatic pressure sensor, which is placed in a special, 10 cm high snow cushion with a diameter of 3 m. The large area of the pillow reduces the measurement error due to the cohesiveness of the snow cover at the edges of the pillow.

The snow meter station is usually supplemented by measuring the temperature and humidity of the air and a TEP06 converter with Pt100 sensors can be connected to it for monitoring the temperature of snow and soil at different depths.



Measuring control panel: H3-G-TA4-SZ in a plastic case with a lock, global SIM Power supply system: solar panel 20 W, battery 12 V / 42 Ah, RS13 controller Mechanic. construction: stainless steel mast 3 m with anchorage, booms for sensors Snow depth measurement: ultrasonic sensor US4200 with radiation cover Snow cover weight measurement: snow gauge with pressure sensor Temperature and humidity measurement: RVT81 / RK5 Measurement of soil temperature and snow cover at 6 points: TEP06 + Pt100

Snow gauge station

Snow gauge station complete Approximate price of a snow gauge station according to the above list of sensors Approximate price snow gauge station without measuring cushion and temp. sensors

7 625.-3 833.-









Floating weather stations

Floating meteorological stations can record both data from sensors located up to 2 m above the surface and from temperature and water quality sensors below the surface.

In addition to temperature and humidity, the quantities measured above the surface include wind speed and direction, incident and reflected global radiation and air pressure. Below the surface, the temperature is usually measured at various depths, sometimes supplemented by qualitative water sensors (pH, O2, conductivity,

A special system of moorings and floating buoys maintains a stable position of the station in windy weather even at different water levels.

Example of a floating weather station set:

Measuring control panel: H7-G-TA4-AZ in plastic case with lock, global SIM Power supply system: solar panel 10 W, battery 12V/9Ah, RS13 controller Mechanical construction: special 2 m high stainless steel mast, 4 floats Temperature and humidity measurement: RVT81/RK5

Wind speed and direction measurement: WS103, WD360 + holder WH700 Global radiation measurement: CMP3 pyranometer + TEP06/P transducer Measurement of water surface temperature and temperature at 10 different depths up to 40 m: 2x TEP06 + Pt100 sensors

Floating weather station Approximate price of a floating meteo. station according to the above list of sensors

7 083,-

Masts for meteorological stations



The masts are made with regard to long life in the outdoor environment. Therefore, in addition to the cheapest 2 m high STO-MET-02 mast, all other masts on offer are made of stainless steel. Fastening ropes and cable ties are also made of stainless steel.

The specialty is a dismantling floating 2 m high mast for weather stations located on the water surface of lakes and ponds. The system of adaptable moorings and floating buoys maintains a stable position of the station in windy weather even at different water levels

STO-MET-02	Mast 2 m, hot-dip galvanized steel, concrete base	
STO-MET-03	One-piece stainless steel mast 3 m, diameter 60 mm, concrete base, fastening ropes	259,-
STO-MET-08	Three-part stainless steel mast 8 m, concrete base, fastening ropes	785,-
BETON	Concrete tiles under meteorological stands, weight 60 kg	24,-
STO-HYD-02	Floating 2m high stainless steel mast, 4 floats, adaptive anchoring system	1 521,-

METEOROLOGICAL SENSORS AND STATION















The VYPAR-3000 floating vapor meter with an area of 3000 cm2 is a sophisticated device for automatic measurement of vapor and rainfall. In addition, wind speed and direction (WS103 and WD360), global radiation (Net radiometer NR Lite 2), humidity and air temperature (RVT13/RK7), rainfall (optical rain gauge RG-114) and water temperature are continuously measured. at five different depths, including the surface temperature of the water inside the evaporator vessel (Pt100 temperature sensors).

Evaporometer control system

The central measuring station of the VYPAR-3000 evaporator consists of a telemetry unit H7. Through a specially designed module, it controls the automated operation of the evaporator as well as data collection from connected meteorological sensors. Automated operation of the evaporator includes regular transmission of measured data to the server via the GSM / GPRS network, pumping of evaporated water into the measuring vessel and possibly its pumping out of the vessel after a heavy rainfall.

If necessary, the floating vapor meter can be supplemented with other measured quantities using sensors connected to free inputs of the H7 measuring control panel.

The power supply of the measuring control panel and the control unit of the evaporometer station is provided by a maintenance-free 12 V accumulator charged from two differently oriented solar panels.

Mechanical design

The robust stainless steel construction of this relatively large floating vapor meter (assembled vapor meter has dimensions of 2.5 x 2.5 m) with a central vapor meter located in the soothing bath helps stable and reliable measurement of both vapor and rainfall, even in stronger winds.

The soothing bath with a floor plan of 1.1 x 1.1 m also has a protective collar, which significantly reduces the penetration of water splinters into the measuring container in the middle of the bath. Because the soothing bath is connected to the surroundings, the level in the measuring vessel is practically as high as the surrounding level, which has a positive effect on maintaining similar conditions inside and outside the measuring vessel (air humidity, water and air temperature). The measuring vessel itself with a diameter of 620 mm is 500 mm deep, but its edge exceeds the surrounding level by only about 10 cm, so that the shading of the level in the measuring vessel is minimal even in low sun.

Assembly and installation

The floating vapor meter is relatively easy to disassemble into 2 parts measuring 2.5 x 1.3 m by means of screw connections, so that it can be easily transported before and after the summer season. For this reason, the evaporator's cabling is also made using detachable connector connections, including meteorological sensors.

The lower left figure shows the two parts of the vapor meter placed on top of each other just after transport before assembling the vapor meter.

Approximate price of the floating vapour meter according to the above list of sensors **VYPAR-3000** 13 750,-













The stationary evaporator VYPAR-1200 contains a measuring vessel with a diameter of 1207 mm with an area of 1.14 m² with a height of 450 mm, which is made of stainless steel material and can be sunk into the level of the surrounding terrain to achieve comparable temperature, wind and humidity conditions with the environment.

Autonomous management of filling and pumping

A simple autonomous evaporator control unit automatically controls the pumping of water into the measuring vessel from a jug located near the vapor meter and also controls a second pump located not at the bottom of the measuring vessel, which is started only when the level of the measuring vessel rises after heavy or prolonged rain. The control unit, including the pumps, is powered by a 12 V accumulator continuously charged from the solar panel.

Evaporation measurement

The actual measurement of evaporation (or rainfall) is provided by a separate assembly of a small H3 telemetry unit and a precision strain gauge level sensor. The binary inputs of the H3 unit monitor both the operation of the two pumps and the low level in the storage tank, to which the H3 unit can respond by sending a warning SMS.

As the H3 monitoring station is separate from the autonomous control of the evaporator (water supply or pumping after rain), the evaporator measuring vessel itself together with the autonomous control unit can be connected e.g. to an existing weather station equipped with RS485 bus (Modbus RTU protocol) and 3 free binary inputs.

VYPAR-1200-H3 Stationary evaporator with autonomous pump control and monitoring unit H40-G VYPAR-1200 Stationary evaporator with autonomous pump control without telemetry unit

3 875, 2 027,-

ACCESSORIES

















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POWER BATTERIES, ACCUMULATORS AND BACKUP ENERGY SOURCES



Display	Туре	Description Price EUR with	hout VA1
		Lithium batteries and battery packs, rechargeable batteries	
		Batteries for real-time backup	
	CR2032	Batteries for real-time backup in units H3, H7, Q2, E2, C8, M4016, M2001 Replacement Li battery 3V / 230 mAh for units M4016, M2001, C8, H3, H7, Q2, E2	1,
O SULL SELECTION SUBMITTED O SULL SELECTION O	W B	Size D lithium batteries Power replaceable battery for H1, H2, H50, STELA-V3 and H531 devices. Devices with a built-in GSM/GPRS communication module have increased current consumption during transmission and require the use of ER34615M batteries. These batteries cannot be recharged.	
	ER34615M	Replacement Li-SOCl ₂ battery 3.6V, 13 Ah, Imax 2A, for H1, H2, H50, STELA, H531-G	20
	ER34615	Replacement Li-SOCl ₂ battery 3.6V, 19Ah, Imax 300 mA, for devices without GSM	17
	W	Power supply battery pack for SMART modules H11, H12 Connector with replaceable power pack for H11 and H12 devices. The battery pack cannot be charged.	
ER3	34615M/K11	Replacement battery 3.6V / 13Ah with cable and connector for SMART module H11, H12	23
	W	Power supply battery packs for data logger H40 Connector with replaceable power pack for H40D and H40G devices. The battery pack cannot be charged.	
E	R34615/K40	Replacement battery pack 3.6V/19Ah with cable and connector for data logger H40-D	23
2ER3	34615M/K40	Replacement battery pack 3.6V/26Ah with cable and connector for data logger H40-G	44
10000000000000000000000000000000000000	В	Backup rechargeable battery for connection boards TB2, TB3 Backup battery for powering units H3, H7, Q2 and E2 with TB2 or TB3 board	
	ICR18650	3.7V/2600 mA Li-on backup battery for H3, H7, Q2, E2, C8 backup power supply	12
FIAM FGH/ tarous w 68A	W B W B B	Maintenance-free gel batteries The batteries are designed for backup power supply of M4016 or H1 stations. Instead of liquid electrolyte, these batteries use a maintenance-free gel over the life of the battery, which is 5 to 10 years, depending on the type. All types of batteries can be continuously charged from an external mains or solar voltage source of 13.8V. Unlike lithium batteries, the self-discharge of accumulators is approximately 50% of the capacity/year, and therefore even with devices with low current consumption, it is necessary to take into account the recharging of the accumulator in the interval of 3 months and shorter. More frequent recharging of the battery prolongs its life, and on the contrary, it shortens with each deep discharge below about 11 V.	
FIAUM /FG		Maintenance-free battery 12 V / 7 Ah for station M4016	22
FIAMM FIGURE A SIGNA		Maintenance-free battery 12 V / 9 Ah for station M4016	35
San Parameter Pa	AKU-12/28 AKU-12/42	Maintenance-free battery 12 V / 28 Ah for limnigraphic stations Maintenance-free battery 12 V / 42 Ah for limnographic stations	107 139
THE COLUMN	B W	Backup power supply for GSM communication modules	139
2 2 2 3		Backup power supply PB35 and PB70.	
UOUT 3.8 VDC 5 VDC 12 VDC 12 VDC DOC 12 VDC DOC DO		The power supply is used for short-term operation of GSM or radio communication modules powered from the mains power supply immediately after a mains supply voltage failure. The energy accumulated in the special capacitor of the PB35 or PB70 source allows up to several minutes of operation of communication devices even after a power failure. The superior system, server or human operator can thus receive practically online information about this extraordinary event. Because the backup PB modules do not contain a battery or accumulator, these elements cannot age and the backup power supply can serve without restriction practically for the lifetime of the connected communication module.	

PB35 Backup power supply for GSM communication devices, capacity 35 mWh

PB70 Backup power supply for GSM communication devices, capacity 70 mWh

71,-

AC POWER SUPPLIES AND BATTERY CHARGERS



Display	Type	Description Price EUR with	nout VAT
		Power supplies 12 VDC and 13.8 VDC	
	-	12 VDC, 0.8A power supplies for powering H1, H2 and H500 series units	
	W	Power supplies suitable for level meters H520, H531 or H1, H2. Power supplies do not	
	W B	allow the connection and charging of a maintenance-free battery.	
	AC/DC-LV1203	Mains adapter for powering H500 series level meters, 12 V DC / 3 A output	19,-
	HDR-15-12	External switching power supply MEAN-WELL, output 12 V DC / 1.25 A, (width 1.5 mod.)	18,-
	DRC-12/10W	External switching power supply DELTA, output 12 VDC / 30 W / 2.1 A (width 18 mm)	18,-
and the second	W B	Power supply 12V / 13.8V 30W 2A, SELV power supply for smaller measuring sets built on FIEDLER AMS units. The 13.8V power supply can be used to charge a 12 V backup battery up to a capacity of 9 Ah.	
	DRC-12/30W	External switching power supply DELTA, output 12 VDC / 30 W / 2.1 A (width 3 modules)	35,-
	DRC-138/30W	External switching power supply DELTA, output 13.8 VDC / 30 W / 1.8 A (width 3 mod.)	35,-
St. a Ame	W B	Power supply 12V / 13,8V 60W 4A, SELV power supply for measuring sets built on FIEDLER AMS units. The 13.8V power supply can be used to charge a 12 V backup battery up to a capacity of 45 Ah.	
	DRC-12/60W	External switching power supply DELTA, output 12 VDC / 60 W / 4.5 A (width 4 modules)	41,-
	DRC-138/60W	External switching power supply DELTA, output 13.8 VDC / 60 W / 3.9 A (width 4 mod.)	41,-
	W D		
	WB	24 VDC power supplies	-
:- Am		Power supply 24V 10W 0.4A, SELV	
	DRC-24/10W	Power supply suitable for powering galvanically isolated 4-20 mA current loops External switching power supply DELTA, output 24 VDC / 10 W / 0.4 A (width 18 mm)	18,-
	W B W B	Power supply 24V 30W 2A, SELV Power supply 24V 60W 4A, SELV Power supplies suitable for measuring sets built on units H3, H7, Q2, E2 or C8 with connection board TB2.	
	DRC-24/30W	External switching power supply DELTA, output 24 VDC / 30 W / 1.25 A (width 3 modules)	35,-
	DRC-24/60W		41,-
in the second	WB	Power supply 24V 100W 3.8A, SELV Power supply for large measuring and control assemblies of instruments. The source is also suitable for powering the heating circuits of a heated SR03 / V rain gauge.	·
	DRC-24/100W	External switching power supply DELTA, output 24 V DC / 100 W / 3.8 A, (width 5 mod.)	62,-
		Distribution board for power supply of FIEDLER AMS measuring sets	
PICAL DEBIL PRICE OF GROUP BY MARKET		The switchboard with overvoltage protection and fuse contains one or more mains sources for powering the M4016 station (H1, H3, Q2, E2,) and possibly also a power supply for heating the SR02 / V or SR03 / V rain gauge. Protection: IP54.	
	Rozvodnice R1	Fitted switchboard, power supply DRC-138 / 30W for powering the backup unit	265,-
((1)	Rozvodnice R2	Fitted switchboard, power supply DRC-138/30W,pow.sup. for heated rain gauge SR02/V	351,-
	Rozvodnice R3	Fitted switchboard, power supply DRC-138/30W,pow.sup. for heated rain gauge SR03/V	333,-
		Battery charger	
	00205 454	12 V lead-acid and Li-FePO4 battery charger Constant output voltage of 14.3 V is suitable for permanently connected lead-acid battery without risk of damage to the battery by overcharging, automatic current limitation to 2 A for heavily discharged battery, efficiency >78%, weight 400 g, integrated protection against short circuit, overvoltage, current and thermal overload. Battery charger 12 V, 3 to 30 Ah; Uout=14.3 V; Imax 2 A; Pmax=30 W	40
	GC30E-4P1	Dattory Grianger 12 v, o to oo Air, Oout-14.0 v, Illian 2 A, Fillan-00 vv	42,-

34,-

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SOLAR PANELS WITH ACCESSORIES



Display Type Description Price EUR without VAT





Solar Panels



Solar panels with accessories

Solar panels are used to recharge backup 12 volt maintenance-free batteries of telemetry stations. Thanks to the low current consumption of the units, a small 10 W solar panel is sufficient for recharging the battery in most applications. Only for those installations where frequent data is sent to the server or where the measurement interval is short, it is advisable to use a solar panel with higher power. Also use the power panel in permanently shaded places such as the north sides of the building or the dense vegetation above the solar panel. Each solar panel contains a mounting box for connecting the cable.

The panels can be ordered with a stainless steel bracket adapted for mounting the panel on a vertical or horizontal wall or with the help of brackets on a mast or a display console.

SOLAR-10W SOLAR-20W SOLAR-30W

1	Pmax: 10 W (18 V / 0.57A), dimensions: 354 x 251 x 18 mm	29,-
	Pmax: 20 W (18 V / 1,10A) rozměry: 435 x 356 x 25 mm	39,-
1	Pmax: 30 W (18 V / 1.6A) dimensions: 650 x 356 x 25 mm	53,-



Solar panel holders and other accessories

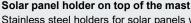
Photovoltaic panel holders for installation on mast or flat surfaces

Stainless steel holders for mounting PV panels in vertical or inclined position. The inclined panel surface provides the greatest output from a unit of panel area year-round. The vertical panel surface does not allow snow to settle on the panel, providing an advantage in winter operation when the sun is low over the horizon. The universal tilting brackets DSP-US and DSP-UL allow the PV panel to be installed at an angle of 45° (inclined position) to 0° (vertical panel position).

The holders are made from stainless steel material and can be ordered with brackets for easy attachment of the panel to the vertical pipe/mast. Without the brackets, the holders can be screwed to a vertical or horizontal surface (DSP10 and DSP20 holders only).

DSP-US **DSP-UL**

Stainless steel solar panel holder for inclined mounting of 5 W and 10 W PV panels	18,-
Stainless steel solar panel holder for inclined PV panel mounting 20 W and 30 W	24,-
Stainless steel holder for vertical mounting of PV panel 20 W and 30 W	20,-
Adjustable stainless steel holder from 0° to 45° for 5 W to 10 W PV panel	48,-
Adjustable stainless steel holder from 0° to 45° for PV panel 20 W to 40 W	52,-



Stainless steel holders for solar panels with outputs of 10 W to 30 W adapted for sliding on the top of the age with a diameter of 60 mm. The holder has the advantage that it does not take up space on the mast, which can be used, for example, for meteorological

DSPVV Stainless steel holder for mounting a 20 W solar panel on top of a 60 mm diameter mast



T1 to T2

Stainless steel stirrups Stainless steel brackets (A2) for attaching brackets and brackets to the mast

Page 67

Konzole-25 to Konzole-60

Mounting bracket

Galvanized brackets with different liner lengths.

Charging controller with load disconnector

Charging controller for a connected maintenance-free battery with very low selfconsumption, which practically does not burden the rechargeable battery even during inactive charging.

The RS13 controller is connected between the solar and panel and the rechargeable battery. The controller limits the charging current to the charged battery and thus prevents it from overcharging. The RS13 controller also contains a disconnector that disconnects the discharged battery (voltage lower than 11 V) from the load. This prevents the battery life from being shortened when it is deeply discharged.

RS13 5-20W PWN SC1205 30-60W

Charging controller supplemented by a discharged battery disconnector for solar 5-20 W 41,-Charging controller supplemented for solar panel 30 to 60 W 40,-

ANTENNAS WITH ACCESSORIES



Display	Туре	Description Price EUR with	thout VAT
		GSM / UMTS antennas	
1	W		
		Antennas for GSM / UMTS band with magnetic or mechanical mount. All types of	
		antennas have a coaxial cable 3 or 4 meters long terminated with a connector.	
0		FME connectors: H1-V1	
		SMA connectors: H1-V2, H2, H3, H7, Q2, E2, H40, STELA-3, H531	
		Magnetic omnidirectional antenna 3 dB	
		This antenna comes with most telemetry units as accessories.	
	AGSM-3dB-FME	Omnidirectional two-band GSM antenna 3 dB, FME connector, 3 m cable	13,-
	AGSM-3dB-SMA	Omnidirectional two-band GSM antenna 3 dB, SMA connector, cable 3 m	13,-
•	W		
		Magnetic omnidirectional antenna 2 dB for surface mounting	
		Antenna suitable for installation on metal cabinets or other, for electromagnetic waves,	
•		difficult to penetrate materials. The antenna is fastened with a nut to a hole with a diameter of 12 mm.	
	AGSM-2dB/P-FME		21,-
•	AGSM-2dB/P-SMA		21,-
	W	Magnetic omnidirectional antenna 9 dB	
1	VV	Antenna suitable for weak signal areas. Robust GSM cable with a length of 3.5 m.	
	•		
	AGSM-9dB-SMA	Omnidirectional GSM antenna 9 dB, magnetic mounting, SMA connector, cable 3.5 m	21,-
	AGSM-9dB-FME	Omnidirectional GSM antenna 9 dB, magnetic mounting, FME connector, cable 3.5 m	21,-
	ı v W	Directional antenna 12 dB	
-		A directional GSM antenna requires precise routing and a homogeneous	
		electromagnetic field. If any of these assumptions are not met, the antenna signal is weaker than that of the AGSM-9dB omnidirectional antenna.	
		would that that of the Acom out of mindroductial another.	
	AGSM -12dB-FME	External directional GSM antenna, 10 elements, coaxial cable 4 m, FME connector	70,-
		External directional GSM antenna, 10 elements, coaxial cable 4 m, SMA connector	70,-
	W	Coaxial extension cables to antennas	
		Duel extension value FME comments and I/A V/A suite OMA comments and I/A V/O I/O	
)	Dual extension cables: FME connectors: H1-V1 units, SMA connectors: H1-V2, H2, H3, H7, Q2, E2, H40 and STELA-3 units	
	PK-GSM-3-FME		18,-
	PK-GSM-5-FME	,	21,-
		Coaxial extension cable 8 m, FME connectors	27,-
		Coaxial extension cable 10 m, FME connectors	30,-
-		Coaxial extension cable 3 m, SMA connectors	18,-
		Coaxial extension cable 5 m, SMA connectors	21,-
		Coaxial extension cable 8 m, SMA connectors	27,-
JU .		Coaxial extension cable 10 m, SMA connectors	30,-
	W	Cover for omnidirectional antenna	
		Stainless steel cover with flange for mechanical fastening and masking of the GSM	
		omnidirectional antenna at the underground sump, shaft, etc. The antenna is placed in	
		the plastic extension of the cover so that the field around the antenna rod is not	
		weakened. Access to the antenna after removing the cover plug on top of the cover. The cable from the antenna is routed through the center of the flange.	
		odbie from the differnia is realled throught the center of the harige.	
	KA-600	Cover for omnidirectional antenna with a height of 600 mm	34,-

SENSOR CABLES AND INTERCONNECTING EXPANDERS



			/ -III
Display	Туре	Description Price EUR with	out VAT
	W	Connecting cables to sensors equipped with an M12 connector	
स्ट्राच	_	Cables with lengths of 2 to 20 m for connecting sensors and sensors to telemetry units and data loggers. PUR insulation suitable for outdoor use or PVC insulation for indoor use only. One end of the cable is always equipped with an M12 connector (female) for connecting the sensor, the other free end of the cable is connected to the terminals of the station / datalogger connection board.	
	2/4F-2M-PUR	4-core cable 2 m with M12 connector / socket, outdoor design	16,-
	2/4F-5M-PUR	4-core cable 5 m with M12 connector / socket, outdoor design	19,-
	/4F-10M-PUR	4-core cable 10 m with M12 connector / socket, outdoor design	26,-
	M12/4F-20M-PUR	4-core cable 20m with M12 connector / socket, outdoor design	43,-
	M12/4F-2M-PVC	4-core cable 2 m with M12 connector / socket	13,-
	M12/4F-5M-PVC	4-core cable 5 m with M12 connector / socket	17,-
T SH T		Extension cables (M12 connectors on both sides of the cable)	
O Marie		Extension cables for connecting sensors with M12 connectors. Extension connectors can be used, for example, to connect sensors without cable outlet (RVT12, RVT13, WS103, WD360, TS1700, TS500,) to the EX6M12 expander.	
M12/4N	1-M12/4F-5M-PUR	4-core extension cable 5 m with M12 connectors (socket / plug), outdoor design.	30,-
M12/4M-	M12/4F-10M-PUR	4-core extension cable 10 m with M12 connectors (socket / plug), outdoor design.	37,-
	M12/4F-15M-PUR	(11 37	43,-
M12/4M-	M12/4F-20M-PUR	4-core extension cable 20 m with M12 connectors (socket / plug), outdoor design.	52,-
	EX6M12/4	Expanders for connecting multiple sensors via RS485 Enclosure with IP66 protection equipped with connectors: 6x M12/4F for connection of sensors, 1x Amphenol-7 for connection of level sensor TSH22, 1x M12/4M for connection with telemetry station/datalogger. The delivery includes a stainless steel holder designed for mounting the expander on a mast or column. Cabinet dimensions: 240x 120 x 65 mm. Expander with M12 connectors for connecting up to 7 sensors to the RS485 bus	131,-
WAR LUT	W	Expansion terminal block for RS485 RS485 terminal expander designed for DIN rail installation for connecting several probes and sensors with RS485 bus to one RS485 terminals. Usual use for stations of type C8, H3, H7, Q2 and others. On request, the expander can be supplied with a 6-core cable connected to the individual terminals connected in parallel. When ordering, it is possible to specify the length of this connecting cable (without specification, the connecting cable is 30 cm long).	
MAETRE	EXSV/DIN- RS485	RS485 terminal expander designed for DIN rail mounting	26,-
EX	(SV/DIN/K- RS485	RS485 terminal expander in DIN rail design, connection cable 30 cm	29,-
+Unap	© GND	Expansion terminal block for RS485 Expander for connecting multiple probes and sensors with RS485 bus to one terminal. Usual use for M4016 stations.	
	EXSV- RS485	RS485 terminal expander	16,-
	W	Amphenol connectors Connector for connecting external signals 7-pin connector (s) used to connect a measuring probe or sensor to a portable unit with a connector connection on the side of the cabinet or to the H40, H50 data logger.	
	C91-K7-P	Connector for connecting sensors to the M4016 or H40, H50, IP66, 7-pin unit	9,-
		Power connector 7-pin connector (sockets) for supplying external power to the unit in a portable design with connectors on the side of the cabinet.	
	C91-K7-D	Connector for connecting external power supply to the M4016 unit, IP66, 7 sockets	9,-

COMMUNICATION SIGNAL CONVERTERS AND INTERCONNECTING CABLES



33,-

19,-

D	isplay	Гуре	Description	Price EUR without VAT





USB / RS-232 and USB / RS-485 converters



The converters are used to connect telemetry stations, data loggers, sensors and measuring probes equipped with the RS232 or RS485 bus to a PC or laptop equipped only with USB ports. Included is a driver CD for all common operating systems.

The USB-485-SV converter is supplemented with screw terminals and a power cable to the 12 V battery terminals, from which both the converter and the connected sensor / probe can also be powered.



USB-485-SV

USB-485 USB / RS-485 converter in basic design 64,-70,-USB / RS-485 converter for parameterization of probes, terminals for bus connection 38,-UC232R-10 USB / RS-232 converter for connecting telemetry stations via SW MOST



Connecting cables between PC / converter and unit / datalogger

Cable for PC connection to STELA-3 and H40 station (RS-232 / M12 connector)

The connecting cable is used to connect the unit, data logger or measuring probe to a computer with a communication program installed. Devices communicating with a PC via the RS232 bus require the insertion of a UC232R-10 PC converter and a connecting cable



Cable for PC connection to H1, H2 and MINILOG stations (RS-232 / M8 connector) 33,-Cable for PC connection to M4016 or M2001 station (RS-232 / CANON connector) 9,-



USB/H7

USB-A communication cable to H3, H7, Q2, E2 units

RS485 / 4 (0) -20 mA converter

PRELIMINARY



Small compact RS485 / 4-20mA converter converting digital RS485 bus signal from sensors to active current output 4-20 mA or 0-20 mA. The transmitter is equipped with an M12/5F connector on the sensor side and an M12/4M connector on the current output side. Cables with M12 connectors are not included in the delivery.

The converter requires a supply voltage of 12 to 24 VDC on the 4-20 mA current output side, which also supplies the connected sensor on the RS485 side. The supply voltage has reserved separate pins in both connectors of the converter.

The transmitter can be used with the following sensors:

PH485, ORP485, ISE485 (pH, redox potential and ion selective electrodes) WS103 (wind speed), WD360 (wind direction)

RVT80 and RVT13 (relative humidity and air temperatures),

ATM10 and ATM11 (atmospheric pressure)

US1200 to US4200 (ultrasonic level sensors)

TSH22 (pressure level sensors)

MAV322

146,-MAV321 RS485 converter (M12/F, Modbus RTU, FINET) to current signal 4 (0)-20 mA (M12/M) RS485 converter (M12/F, Modbus RTU, FINET) to 2 current signals 4 (0)-20 mA (M12/M) 154,-



RS-232 / RS-485 MODBUS RTU converter to telemetric station

External communication module RS-232 / RS-485_MODBUS_RTU

The MEK1 module is used to connect external devices via a serial communication line RS-232 to a telemetry station with RS45 bus. On the side of the connected external device, the module has an RS-232 bus connected to a separate 9-pin CANON connector, and on the side of the connected M4016 station (H1, H7,...) it is an RS-485 bus under the FINET protocol. In the basic version, the MODBUS_RTU communication protocol is implemented on the RS-232 side in the MEK1 module.

MEK1/DIN Converter for communication M4016 with external device via RS-232

MECHANICAL ASSEMBLY ELEMENTS



		_	
Display	Type	Description Price EUR with	nout VAT
	W	Console	
		Mounting bracket Galvanized brackets with different liner lengths. The console can be used for suitable placement of the solar panel, antenna or even the measuring sensor and sensor. 1 or 2 T1 brackets can be used to attach the element to the bracket.	
	Konzole-25	Mounting bracket 25 cm for mounting a solar panel or directional GSM antenna	13,-
	Konzole-40	Mounting bracket 40 cm for mounting a solar panel or directional GSM antenna	18,-
	Konzole-50	Mounting bracket 50 cm for mounting a solar panel or directional GSM antenna	19,-
	Konzole-60	Mounting bracket 60 cm for mounting a solar panel or directional GSM antenna	21,-
\bigcap	w	Stainless steel stirrups Caliper with nut Stainless steel brackets (A2) fitted with a nut and spring washer in three sizes for attaching various brackets to a mast, railing or boom brackets.	
7 74 4	∯ ∯ T1	Stainless steel caliper M10 x 37 mm (1 "), nuts, washers	5,-
	T1,5	Stainless steel caliper M10 x 51 mm (1 ½ "), nuts, washers	6,-
	T2	Stainless steel caliper M12 x 63 mm (2 "), nuts, washers	7,-
1			
	ST2-150 ST2-200 STO-MET-02 W BETON	Hot-dip galvanized racks for cabinets A stand marked ST2 can be used for outdoor installation of the ARIA32 cabinet, and a ST3 stand for a larger SCH cabinet. The mast type STO-MET-02 is intended for small meteorological stations in ARIA32 cabinets, for which a concrete tile can also be ordered. The mast is fixed to the concrete tile with dowels and stainless steel screws. The mast and both stands are protected against the effects of the weather by hot-dip galvanizing. The cabinets are attached to these holders using the supplied 4 M5x30 screws. M5 threads are prepared in stands/masts. The mounting holes for the screws are only accessible when the cabinet door is open, and because the screw heads are hidden in the cabinet, they make it impossible to disassemble the cabinet without forcibly opening it. Robust stand for ARIA32 and SCH cabinets, height 150 cm, hot-dip galvanized weldment Robust stand for ARIA32 and SCH cabinets, height 200 cm, hot-dip galvanized Mast for placing the ARIA32 cabinet, height 200 cm, hot-dip galvanized weldment Concrete tiles under the poles Concrete foundation under the heel of meteorological poles and under rain gauge stands Concrete tiles under meteorological and rain gauge stands, weight 60 kg Bracket for fixing the ARIA or SCH cabinet to the pole	113,- 118,- 133,-
	_	Stainless steel holder for attaching the ARIA or SCH cabinet to a pole with a diameter of more than 40 mm using BANDIMEX stainless steel strips. 2 DSS-2 holders are required to mount one cabinet.	
	DSS-2	Stainless steel holder for attaching the cabinet to the pole using Bandimex tapes	13,-
&	W	Mast booms Arms for meteorological masts Robust stainless steel sleeves with welded 8 mm or 10 mm log booms for 33 mm or 50 mm diameter masts, length 280 or 400 mm, various combinations.	
v			
	M-1.08.33.400	Single-arm boom 8 mm for meteo mast with a diameter of 33 mm, length 400 mm	25,-
	M-1.08.33.400	Two-arm boom 8 mm for meteo mast with a diameter of 33 mm, length 2x400 mm	38,-
	M-1.10.50.280	Single-arm boom 10 mm on a meteo mast with a diameter of 50 mm, length 280 mm	30,-
STO-RAI	/ 1-2.10.50.280	Two-arm boom 10 mm on a meteo mast with a diameter of 50 mm, length 2x 280 mm	43,-

WATER METERS





FLODIS water meters	page 69	
FLOSTAR-M water meters	page 69	1-1-1
WOLTEX water meters	page 70	
Speed sensors for water meters	page 70	
Other accessories for water meters	page 70	

INDUSTRIAL WATER METERS AND THEIR ACCESSORIES



Display Type Description Price EUR without VAT



FLODIS - industrial water meters for single-flow cold water

Single-flow vane water meter, dry-running, for cold water, accuracy class: horizontal position - C, vertical position - B, DN 15 to DN 32 (threaded connection G3/4" to 1 2/4")

Mounting position: Horizontal - accuracy class C without demands for calming pipe length, very low pressure drop, high accuracy over a wide flow range, low starting flow, permanently loadable at Qmax, high overload capacity, long-term constant metrological parameters, water inlet filter, high resistance to impurities in the water, hydrodynamically balanced turbine, dry-running counter with wiper as standard preequipped for the installation of CYBLE communication elements (1 I / pulse). Water meters are suitable for reducing the cross-section and replacing obsolete water meters

FLODIS Q2,5-DN15-L165-G3/4 FLODIS Q2,5-DN15-L165-G1 FLODIS Q4-DN20-L190-G1 FLODIS Q6,3-DN25-L260-G5/4 FLODIS Q10-DN32-L260-G6/4

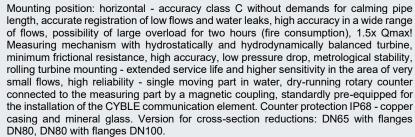
Water meter Qn = 2.5 m^3 / hour, DN 15 L = 165 mm, thread G $\frac{3}{4}$ ".	60,-
Water meter Qn = 2.5 m^3 / hour, DN 15 L = 165 mm, thread 1"	65,-
Water meter Qn = 4 m ³ / hour, DN 20 L = 190 mm, thread 1"	82,-
Water meter Qn = 6.3 m^3 / hour, DN 25 L = 260 mm , thread 1 $1/4$ "	171,-
Water meter Qn = 10 m ³ / hour. DN 32 L = 260 mm, thread 1 1/2"	208



FLOSTAR-M - industrial water meters for single-flow cold water

Threaded design

Single-flow vane water meter, dry-running, for cold water, accuracy class: horizontal position - C, vertical position - B, DN 40 (threaded connection G 2 ")



FLOSTAR Q16-DN40-L300-G2 FLOSTAR 25-DN50-L270-G2,5 FLOSTAR 25-DN50-L300-G2,5

	Water meter Qn = 16 m ³ / hour, DN 40 L = 300 mm, thread 2"	398,-
;	Water meter Qn = 25 m^3 / hour, DN 50 L = 270 mm, thread 2 1/2"	456,-
;	Water meter Qn = 25 m ³ / hour, DN 50 L = 300 mm, thread 2 1/2"	485,-



FLOSTAR-M - industrial water meters for single-flow cold water Flange design

Single inlet vane water meter, dry running, for cold water, accuracy class: horizontal position - C, vertical position - B, DN 40 (Flange connection DN50 to

FLOSTAR Q25-DN50-L270	Water meter Qn = 25 m ³ / hour, DN 50 L = 270 mm, flange PN16	531,-
FLOSTAR Q25-DN50-L300	Water meter Qn = 25 m ³ / hour, DN 50 L = 300 mm, flange PN16	531,-
FLOSTAR Q40-DN65-L300	Water meter Qn = 40 m ³ / hour, DN 65 L = 300 mm, rotating flange PN16	768,-
FLOSTAR Q63-DN80-L300	Water meter Qn = 63 m ³ / hour, DN 80 L = 300 mm, rotating flange PN16	1 108,-
FLOSTAR Q63-DN80-L350	Water meter Qn = 63 m ³ / hour, DN 80 L = 350 mm, rotating flange PN16	1 108,-
FLOSTAR Q100-DN100-L350	Water meter Qn = 100 m ³ / hour, DN 100 L = 350 mm, rotating flange PN16	1 371,-
FLOSTAR Q100-DN100-L360	Water meter Qn = 100 m ³ / hour, DN 100 L = 360 mm, rotating flange PN16	1 454,-
FLOSTAR Q160-DN150-L450	Water meter Qn = 160 m ³ / hour, DN 150 L = 450 mm, rotating flange PN16	2 956,-



Industrial water meters for cold water WP and WS, accuracy class B

WOLTEX-M Horizontal woltman water meter (WP)

Dry running water meter, for cold water, accuracy class B is guaranteed in all mounting positions, DN 50 to DN 500

Mounting position horizontal, vertical - accuracy class B, high overload capacity up to twice Qmax, removable - self-calibrating measuring mechanism, hydrodynamically balanced turbine, minimum frictional resistances, rotary dry-running counter, long life and metrological stability, counter standard pre-equipped for CYBLE communication module installation

WOLTEX-M DN50-Q40-L200	Water meter Qn=40 m³/hod, DN 50, L=200 mm, PN16	502,-
WOLTEX-M DN65-Q63-L200	Water meter Qn=63 m³/hod, DN 65, L=200 mm, PN16	529,-
WOLTEX-M DN80-Q100-L200	Water meter Qn=100 m³/hod, DN 80, L=200 mm, PN16	568,-
WOLTEX-M DN80-Q100-L225	Water meter Qn=100 m³/hod, DN 80, L=200 mm, PN16	614,-
WOLTEX-M DN100-Q160-L250	Water meter Qn=160 m³/hod, DN 100, L=250 mm, PN16	654,-
WOLTEX-M DN125-Q160-L250	Water meter Qn=160 m³/hod, DN 125, L=250 mm, PN16	841,-
WOLTEX-M DN150-Q400-L300	Water meter Qn=400 m³/hod, DN150, L=300 mm, PN16	1 034,-
WOLTEX-M DN200-Q400-L350	Water meter Qn=400 m³/hod, DN 200, L=350 mm, PN16	1 456,-
WOLTEXM DN250-Q1000-L450	Water meter Qn=1000 m³/hod, DN 250, L=450 mm, PN16	2 512,-
WOLTEXM DN300-Q1600-L500	Water meter Qn=1600 m³/hod, DN 300, L=500 mm, PN16	4 790,-



Remote meter reading – inductive speed sensors for water meters



Inductive speed sensors for FLOSTAR and FLODIS water meters

Inductive speed sensors for FLOSTAR and FLODIS water meter

Inductive water meter speed sensor, output constant 1 l/pulse, sensing principle ensures absolute compliance with the water meter counter, non-magnetic non-contact principle - cannot be affected by external magnetic field, sensor does not generate false pulses in case of vibrations, etc.

CYBLE

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Inductive speed sensors for ELSTER water meters

Inductive speed sensors for ELSTER water meters, built-in battery for up to 10 years of operation, IP68 protection, cable length 2 m, output load 30 VDC / 30 mA, frequency max 75 Hz, pulse width CH 1P = 5 ms, CH 2P = 50 ms.

Inductive speed sensors for ELSTER water meters **FALCON**

Page 24





Remote meter reading - OPTO speed sensors for water meters



OPTO sensors

OPTO sensor for water meters ABB, Hydrometer, Sensus Metering System (formerly Meinecke), Schlumberger, etc.

OPTO VC, VLC OPTO sensors for the water meter

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Brass fitting with seal (delivery only with water meter) W

Other accessories for water meters

5,-WAAI-012 Water meter brass fitting DN15, price for 1 pair including seals **WAAI-013** Water meter brass fitting DN20, price for 1 pair including seals 7,-**WAAI-014** Water meter brass fitting DN25, price for 1 pair including seals 13,-**WAAI-015** Water meter brass fitting DN30, price for 1 pair including seals 20,-**WAAI-016** Water meter brass fitting DN40, price for 1 pair including seals 27,-



Spring-loaded non-return valve (delivery only with water meter)



ZK-DN15 Spring-loaded non-return valve for domestic and industrial water meters DN15 4,-ZK-DN20 Spring-loaded non-return valve for domestic and industrial water meters DN20 5,-ZK-DN25 Spring-loaded non-return valve for domestic and industrial water meters DN 25 9,-ZK-DN32 Spring-loaded non-return valve for domestic and industrial water meters DN32 18,-



SOFTWARE AND SERVER SERVICES, SIM CARDS



Software and services servers page 72

SIM cards and data packages page 75

SOFTWARE AND SERVER SERVICES - DATAHOSTING



Display Type Description Price EUR without VAT

В

W

Datahosting - FMweb and ClouFM portal

Online web services for registered users of FIEDLER AMS devices

FMweb and CloudFM are online web services providing users with access to measured data, diagnostics and parameter settings of individual measuring stations and data loggers. The set of these services is called Datahosting. The service includes rental of space on a data server for data collection from stations equipped with a communication module, user-friendly creation of graphs, exports of measured data from the database on the server to the PC of an authorized client, etc. Access to archived data is allowed to authorized clients via web interface.



The newer CloudFM service is designed for all devices with a focus on new device types and remote and manual utility reading, and is available at cloud.fiedler.company.

Both services differ graphically and also have different login details. The default functionality is similar, the visualization of the new version then adds several new features - for example, allows you to insert photos of the location of the devices, display the location or other important information written, for example, in the form of a note in the FIEDLER Connect mobile application. The cloud portal also offers a set of advanced graphic blocks for creating control rooms and surveillance systems such as map visualizations and technology screens.





The services work with the same devices at the same time. In general, the devices are available in both services, only in the newer cloud, more options are available and functions such as data can be included in dispatch monitoring. If the user has established access to both services, he can choose which of the services he will use at any time.

Parameterization of devices

Key features of the portal include tools for managing measuring points and communication devices. The system allows full remote parameterization in devices from a web browser from almost anywhere. All changes made in the device parameterization are recorded and archived. The user can browse the change history and restore the settings in the device according to the older configuration.

The alarm system allows you to set alerts associated with the monitoring of measured quantities and error conditions of physical devices in the field.

Login and connection to the services is secured by a certificate and encrypted according to security standards.

Charging for the service according to the type and number of devices / stations registered with the user:

The **Datahosting** service is intended for users with the number of stations from 1 to 50, while only the first 20 stations are charged.

The **Datahosting+** service is intended for those users who own more than 50 stations.

Prices are set for remote readings by design.

Datahosting S

Server services per station and month (1 to 20 stations per user)	
Server services per station and month (over 50 stations per user)	1,60

MOST



Program for parameterization of devices and basic processing of measured data

MOST is a local desktop application designed for computers with the Windows operating system, which allows the configuration of FIEDLER measuring devices first launched on the market before 2015. The program is mainly used to set parameters of devices connected to the computer via communication cable or remotely via server service.



The program is also used to display the current measured values and states of the binary inputs / outputs. MOST is a suitable tool for basic evaluation of measured data in the field. An important function of the program is device diagnostics and the ability to perform unit connectivity tests.

Loading data into the program can be done either by cable from the connected station, by exporting a data file from the server or by dialing a data call. The program is useful for parameterizing units in places where there is no possibility of internet connection.

The measured data from the device can be visualized in the form of graphs and tables and possibly also downloaded to a computer and backed up.

The program supports Windows 7 and higher.

You can get the current version of the MOST program in the "Downloads" section of the manufacturer's website. Assuming you have purchased a license number, you will receive an unlimited version. Otherwise, the program serves as a DEMO version without the possibility of communication with the device.

The MOST program is not part of the standard delivery of the station.

The program can be purchased in the standard version for installation on one computer or in the version of volume licensing (ML), which allows installation on an unlimited number of computers within the organization.

MOST
MOST-NL
MOST MI

Basic setting and evaluation program for FIEDLER AMS stations	
Second and additional program licenses within one organization	
Volume licensing program for an unlimited number of installations within one organization	310,-



MOST4

Program for setting the parameters of devices placed on the market after 2015



The application is primarily intended for use in a cloud environment where the user does not need to install any software and can parameterize the devices remotely using a web browser and server services within Datahosting.

For devices installed in locations without available connectivity or for devices without a communication module, a local off-line version of this product can be used, which is

installed on a Windows or Linux operating system as a traditional desktop application. It is then possible to communicate with the device locally, eg via a connecting cable or wirelessly using Bluetooth communication, and to perform direct parameterization of the units.





Different modes of visualization of set parameters.

The user environment of the application is designed with regard to its use by experienced experts and professionals, as well as ordinary users without detailed knowledge of the structures of individual groups of parameters of the set device. The working environment of the application can be displayed in various visualization modes according to the user experience (tree mode and wizard mode).

How to get MOST4

The online version of the CloudFM MOST4 service is available to users of FIEDLER AMS devices via the CloudFM web portal. To access this portal, the user must first have an account set up in the cloud. After logging in to the account, the user will see the Device stations configuration tab, to which he has been assigned user rights for their parameterization.

An offline version of the MOST4 product is available in the software download center on the manufacturer's website.

The MOST4 program is not part of the standard delivery of the station.

MOST4 Program for setting parameters and viewing measured data

free

SOFTWARE AND SERVER SERVICES

Hladiny.cz



Current levels of rivers and precipitation totals

The freely accessible server contains current water levels measured by FIEDLER AMS telemetry stations on the reporting profiles of CHMI and companies Povodí s.p. and levels of levels from local warning systems of cities and municipalities (LWS).

On the server, weekly level graphs and small two-day graphs for mobile phones are updated immediately after data transfer from the station to the database to the server.

FIEDLER Connect



Mobile application for data readings, device management and parameterization

FIEDLER Connect is a mobile application running on the Android OS designed for direct communication with FIEDLER AMS devices, primarily for the purpose of reading data from Smart metering modules, for their configuration and diagnostics. The extended version of the application also offers a user interface for manual consumption reading.



Features and functions

- Display of current data and device configuration locally and via the cloud
- Wireless communication with devices simply by attaching via NFC or Bluetooth
- Application usable with other FIEDLER devices without NFC and Bluetooth support
- · Ability to read alarms and events from the device
- Unit diagnostics and support for manual readings
- Support for off-line work in the application
- High security and access control

The application is synchronized with the FIFLER AMS CloudFM web portal. In the case of manual readings, the data is recorded in the application and sent to the web portal at the same time.

FIEDLER Connect can be downloaded to a mobile phone on Google Play.

FIEDLER CONNECT

Mobile application for data readings, device management and parameterization

free

ProbeSet





The program is intended for experts and is used for the first setting or change of internal parameters of probes and sensors manufactured by FIEDLER. Selected sensors equipped with the RS485 bus can be set. The program can be used, for example, to set the communication address, change the communication protocol from FINET to Modbus RTU and vice versa (if the given sensor has for this support), set and calibrate selected parameters and more.

A USB-485 or USB-485-SV converter can be used for the connection between the PC and the set probe / sensor, which is supplemented with screw terminals and a power cable to the 12 V battery terminals.

ProbeSet software is available on the manufacturer's website after logging in to the download center

ProbeSet SW procedure for setting parameters of FIEDLER AMS sensors with RS485 bus

free

SOFTWARE AND SERVER SERVICES

28,00

60,00

SIM CARD RENTAL AND DATA PACKAGES



Display Type Description Price EUR without VAT

W

SIM cards



SIM card rental for FIEDLER AMS telemetry stations

One-time activation of the SIM from O2 with the M2M tariff and its subsequent long-term rental based on a contractual relationship only to FIEDLER AMS stations. The price of the monthly flat rate includes 1 MB of GSM / GPRS communication data. Any sending of an SMS from the station will be additionally charged with the amount of CZK 1.30. Invoicing together with data hosting quarterly (for less than 5 cards per user) or monthly (5 or more cards per user) according to the actually transferred data and the number of sent SMS.

At the beginning of the rental, the SIM card supplier performs its one-time paid activation.

flat rate SIM O2-FM2M

Monthly fee 40 CZK, included 1 MB of data 1,60

One-time activation of SIM from O2, M2M tariff, flat rate CZK 40 / month / 1 MB of data 10,00



Data packages for level meter H531



Data transfers and cloud data hosting services for the H531 level meter

Data packages are used to extend data hosting services on the manufacturer's server (graphical and tabular display of measured data) and costs for GSM / GPRS data transmissions of the H531-G level meter over the basic 5-year period, which is already included in the purchase price of the level meter.

After 5 years from the acquisition of the level meter, the prepaid operating costs for data hosting services will be exhausted and these services must be extended by purchasing one of the offered data packages or operating the H531-G level meter without using remote access services

The price advantage for data hosting services within the data package applies to the first two H531-G level meters operated by one customer.

Datahosting H531 GSM 1D2Y
Datahosting H531 GSM 1D5Y

Two-year GSM data package, transfers once a day from H531 to the server, data hosting

Datahosting H531 GSM 1D5Y Five-year GSM data package, transfers once a day from H531 to the server, data hosting

Place for your notes





Price list · edition 1.01 · 1/2025 · new release will supersede the old issue of validity

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