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Příloha č.4_Minimální technické parametry požadovaného plnění

Plánovaná konfigurace sondy:
(Čísla v závorce odpovídají číslům senzorů od výrobce)

Multiparametrická sonda YSI EXO 2 s hloubkovým senzorem do 100 m
Stírací mechanismus pro automatické čistění
Senzor Total algae pro stanovení Chlorophylu *a* a Phycocyaninu (SKU: 599102-01)
Senzor O_2 (optický, SKU: 599100-01)
Senzor EC/T (pro měření profilů, SKU: 599870)
Senzor pH/ORP (SKU: 599706)
Senzor FDOM (SKU: 599104-01)
Senzor pro měření turbidity (SKU: 599101-01)

Adaptér pro USB výstup
Zobrazovací jednotka pro EXO sondu s GPS
Dobíjecí baterie pro zobrazovací jednotku, vč. nabíječky
Propojovací kabel 66 m
Přepravní kufřík pro EXO sondu
Kalibrační roztoky pro pH, EC, Turb., ORP

Cena včetně dopravy, proškolení obsluhy, nastavení, zprovoznění a kalibrace přístroje.
Do nabídky specifikujte délku záruky, záruční a pozáruční servis (např. zapůjčení náhradního přístroje při poruše, termíny oprav, apod.)

Specifikace délky záruky:

24 měsíců

Záruční po záruční servis:

ANO v ČR

Jednatel společnosti

Jan Herber

EnviroINVEST®
Business centrum Klamovka
Plzeňská 155/113,150 00 Praha 5
IČO: 290 52 980

Instrument Specifications*

EXO1 Sonde		
Ports	4 sensor ports Peripheral port: 1 power communication port	
Size	Diameter: 4.70 cm (1.85 in) Length: 64.77 cm (25.50 in)	
Weight	1.65 kg (3.63 lbs) with 4 probes, guard and batteries installed	
EXO2 Sonde		
Ports	7 sensor ports (6 ports available when central wiper used) Peripheral ports: 1 power communication port, 1 auxiliary expansion port	
Size	Diameter: 7.62 cm (3.00 in) Length: 71.10 cm (28.00 in)	
Weight	2.65 kg (5.83 lbs) with 5 probes, guard and batteries installed	
Sondes		
Operating Temperature	-5 to 50°C	
Storage Temperature	-20 to 80°C (except 0 to 60°C for pH and pH/ORP sensors)	
Depth Rating	0 to 250 m (0 to 820 ft)	
Communications	Computer Interface: Bluetooth wireless technology, RS-485, USB Output Options: USB with signal output adapter (SOA); RS-232 & SDI-12 with DCP-SOA	
Sample Rate	Up to 4 Hz	
Battery Life	90 days**	
Data Memory	512 MB total memory; >1,000,000 logged readings	
Sensors		**Calculated Parameters**
Conductivity	pH	Salinity
Depth	Temperature	Specific Conductance
Dissolved Oxygen	Total Algae PC (Chlorophyll + BGA-PC)	Total Dissolved Solids
Fluorescent Dissolved Organic Matter (fDOM)	Turbidity	Total Suspended Solids
ORP		
EXO Handheld		
Size	Width: 12.00 cm (4.72 in) Height: 25.00 cm (9.84 in)	
Weight	0.71 kg (1.56 lbs) without batteries	
Operating System	Windows CE 5.0	
Operating Temperature	-10 to 50°C	
Storage Temperature	-20 to 80°C	
IP Rating	IP-67	
Data Memory	2 GB total memory; >2,000,000 data sets	
Accessories		
Cables (non-vented)	Flow cells	Sonde/sensor guard
Carrying case	KOR software	Calibration cup
DCP Signal Output Adapter	USB Signal Output Adapter	
Warranty		
1 Year	pH, ORP, and optical DO membranes	
2 Years	Cables, sondes (bulkheads), handheld, and the following sensors: conductivity, temperature, depth, and optical sensors	

* Specifications indicate typical performance and are subject to change. Please check EXOwater.com for up-to-date information.

** Typically 90 days at 20°C at 15-minute logging interval; temperature/conductivity, pH/ORP, DO, and turbidity sensors installed on EXO1; or temperature/conductivity, pH/ORP, DO, total algae, and turbidity sensors installed with central wiper that rotates once per logging interval on EXO2. Battery life is heavily dependent on sensor configuration.

Sensor Specifications*

Sensor	Range	Accuracy*	Response	Resolution
Barometer	375 to 825 mmHg	±1.5 mmHg within from 0 to 50°C	-	0.1 mmHg
Blue-green Algae Phycocyanin (part of Total Algae sensor)	0 to 100 µg/L PC, 0 to 100 RFU	Linearity: R^2 > 0.999 for serial dilution of Rhodamine WT solution from 0 to 100 µg/mL PC equivalents Detection Limit: 0.03 µg/L PC	T63<2 sec	0.01 µg/L PC; 0.01 RFU
Chlorophyll (part of Total Algae sensor)	0 to 400 µg/L Chl; 0 to 100 RFU	Linearity: R^2 > 0.999 for serial dilution of Rhodamine WT solution from 0 to 400 µg/L Chl equivalents Detection Limit: 0.07 µg/L Chl	T63<2 sec	0.01 µg/L Chl, 0.01 RFU
Conductivity [1]	0 to 200 mS/cm	0 to 100: ±0.5% of reading or 0.001 mS/cm, w.i.g.; 100 to 200: ±1% of reading	T63<2 sec	0.0001 to 0.01 mS/cm (range dependent)
Depth (non-vented)	0 to 10 m (0 to 33 ft) [2]	±0.04% FS (±0.004 m or ±0.013 ft)	T63<2 sec	0.001 m (0.001 ft) (auto-ranging)
	0 to 100 m (0 to 328 ft) [2]	±0.04% FS (±0.04 m or ±0.13 ft)		
	0 to 250 m (0 to 820 ft) [2]	±0.04% FS (±0.10 m or ±0.33 ft)		
Dissolved Oxygen Optical	0 to 500% air saturation	0 to 200%: ±1% of reading or 1% saturation, w.i.g.; 200 to 500%: ±5% of reading [3]	T63<5 sec [4]	0.1% air saturation
	0 to 50 mg/L	0 to 20 mg/L: ±0.1 mg/L or 1% of reading, w.i.g.; 20 to 50 mg/L: ±5% of reading [3]		0.01 mg/L
fDOM	0 to 300 ppb Quinine Sulfate equivalents (QSE)	Linearity: R^2 > 0.999 for serial dilution of 300 ppb QS solution Detection Limit: 0.03 ppb QSE	T63<2 sec	0.01 ppb QSE
ORP	-999 to 999 mV	±20 mV in Redox standard solutions	T63<5 sec [5]	0.1 mV
pH	0 to 14 units	±0.1 pH units within ±10°C of calibration temp; ±0.2 pH units for entire temp range [6]	T63<3 sec [7]	0.01 units
Salinity Calculated from Conductivity and Temperature	0 to 70 ppt	±1.0% of reading or 0.1 ppt, w.i.g	T63<2 sec	0.01 ppt
Specific Conductance Calculated from Conductivity and Temperature	0 to 200 mS/cm	±0.5% of reading or .001 mS/cm, w.i.g	-	0.001, 0.01, 0.1 mS/cm (auto-scaling)
Temperature	-5 to 50°C	-5 to 35°C: ±0.01°C [8] 35 to 50°C: ±0.05°C [8]	T63<1 sec	0.001 °C
Total Dissolved Solids (TDS) Calculated from Conductivity and Temperature	0 to 100,000 g/L Cal constant range 0.30 to 1.00 (0.64 default)	Not Specified	-	variable
Total Suspended Solids (TSS) Calculated from Turbidity and TDS	0 to 1500 mg/L	Not Specified	T63<2 sec	variable
Turbidity [9]	0 to 4000 FNU or NTU	0 to 999 FNU: 0.3 FNU or ±2% of reading, w.i.g., 1000 to 4000 FNU: ±5% of reading [10]	T63<2 sec	0 to 999 FNU: 0.01 FNU; 1000 to 4000 FNU: 0.1 FNU

All sensors have a depth rating to 250 m (820 ft), except shallow and medium depth sensors. EXO sensors are not backward compatible with 6-Series sondes

* Specifications indicate typical performance and are subject to change. Please check EXOwater.com for up-to-date information. Accuracy specification is attained immediately following calibration under controlled and stable environmental conditions. Performance in the natural environment may vary from quoted specification.

[1] Outputs of specific conductance (conductivity corrected to 25 C) and total dissolved solids are also provided. The values are automatically calculated from conductivity according to algorithms found in *Standard Methods for the Examination of Water and Wastewater* (Ed. 1989).

Accuracy specifications apply to conductivity levels of 0 to 100,000 µS/cm

[2] Relative to calibration gases

[3] When transferred from air-saturated water to stirred deaerated water

[4] When transferred from water-saturated air to Zobell solution

[5] Within the environmental pH range of pH 4 to pH 10

[6] On transfer from water saturated air to rapidly stirred air-saturated water at a specific conductance of 800 µS/cm at 20 C, T63<5 seconds on transfer from water-saturated air to slowly-stirred air-saturated water

[7] Temperature accuracy traceable to NIST standards

[8] Calibration: 1-, 2-, or 3-point, user-selectable

[9] Specification is defined in AMCO-AEPA Standards

w.i.g. = whichever is greater