

X•Series is a family of sensor-Xchangeable oceanographic instruments that allows you to change an instrument's sensor load in the field and on-demand.

With an X•Series instrument and Xchange™ field-swappable sensor heads, your CTD can become an SVTP, shallow range instruments can be made to go deep, and temperature range can be extended or tightened as needed.

All X•Series instruments share a common architecture, so any sensor head can be attached to nearly any instrument, regardless of size or type: real-time probe, vertical profiler, or in-situ logger.

Total flexibility – of instrument model, of sensor type, and of sensor range – ensures that the right instrument is always available.



### MICRO•X

Single port, real-time instrument for surface applications

### BASE•X<sub>2</sub>

Compact CTD or SVP profiler with embedded WiFi and GPS

### SMART•X

Triple port, real-time probe for AUV integration

### MINOS•X

Smallest combined CTD/SVP on the market

### METREC•X

Multi-parameter, real-time instrument for in-situ monitoring or ROV use

### PLUS•X

Multi-parameter, real-time instrument for profiling or in-situ monitoring

## Key Benefits

- **Greater return on investment:** Each instrument can multi-task as CTD, SVTP, and many other configurations at multiple pressure ranges.
- **Right instrument always ready:** Calibrated sensors are shared amongst all X•Series instruments, ensuring that the right instrument is always field-ready.
- **Reduced downtime:** Recalibrated sensors sent to the instrument means the instrument never leaves the field for recalibration.
- **Greater system redundancy:** Mobility of sensor-heads and modularity of instruments minimizes the risk of downtime on the vessel.

		<i>Typical Applications</i>	<b>No. of Ports</b>	<b>Sensor Configuration</b>	<b>Size (dia. x length, mm)</b>	<b>Communications</b>	<b>Internal Logging</b>	<b>Input Voltage (v)</b>	<b>Optional Analog Inputs</b>	<b>Materials</b>	<b>Max Depth (m)</b>	<b>Weight in Air (kg) <sup>6</sup></b>	<b>Weight in Water (kg) <sup>6</sup></b>
<b>REAL-TIME</b>	<b>MICRO•X</b>	<i>Sea chest or transducer mount</i>	1	P1, S1	33 x 240 <sup>1</sup>	RS-232, RS-485	N	8-26	n/a	Acetal <sup>5</sup>	500	0.24	0.09
										Titanium	6000	0.39	0.25
	<b>SMART•X</b>	<i>AUV, glider or other vehicle</i>	3	P1S2, P0S3	70 x 420	RS-232, RS-485	N	8-26	n/a	Acetal	500	0.73	0.14
										Titanium	6000	1.86	1.27
	<b>METREC•X</b>	<i>Multi-parameter in-situ or ROV use</i>	5	P2S2, P1S4	100 x 482	RS-232, RS-485	N	8-36 <sup>3</sup>	4	Acetal	500	3.30	1.20
									7075 Alum	6000	5.20	3.10	
	<b>METREC•XL</b>	<i>Multi-parameter in-situ or ROV use</i>	9	custom	127 x 541	RS-232, RS-485	N	8-36 <sup>3</sup>	4	Acetal	500	5.20	1.60
	<b>bathy-METREC•X</b>	<i>High accuracy bathymetry with Digiquartz®</i>	5	P2S2, P1S4	100 x 495	RS-232, RS-485	N	8-36 <sup>3</sup>	2	7075 Alum	6000	5.00	3.00
<b>INTERNAL POWER</b>	<b>BASE•X<sub>2</sub></b>	<i>Shallow water vertical profiling</i>	2	P1S1	69 x 390	WiFi, RS-232, RS-485	Y	9-28 <sup>4</sup>	n/a	Acetal	100	1.17	0.49
										500			
	<b>MINOS•X</b>	<i>Vertical profiling</i>	3	P1S2, P2S1	76 x 597	RS-232, RS-485, WiFi <sup>2</sup>	Y	8-26 <sup>4</sup>	2	Acetal	1000	2.23	0.73
										Titanium	6000	4.67	3.14
	<b>PLUS•X</b>	<i>Multi-parameter vertical profiling or in-situ</i>	5	P2S2, P1S4	100 x 881	RS-232, RS-485, WiFi <sup>2</sup>	Y	8-26 <sup>4</sup>	4	Acetal	500	5.90	2.20
									6061 Alum	5000	7.70	3.40	
									7075 Alum	6000	7.70	3.40	

### Sensor Configurations

“P” type port is compatible with SV, C, and CT•Xchange™ sensors

“S” type port is compatible with T, P, and Tu•Xchange™ sensors

Numeric value is the quantity of ports of that type

Example: P1S2 = 1 “P” type port and 2 “S” type ports

Standard configurations listed. Inquire for additional options.

### Notes

<sup>1</sup> Overall length varies depending on Xchange™ sensor installed.

<sup>2</sup> When Data•Xchange is attached

<sup>3</sup> 15-36V with select altimeter options

<sup>4</sup> Internally powered via battery with external power capability

<sup>5</sup> Acetal, 500 m Micro•X available in S1 configuration only

<sup>6</sup> Overall weight varies depending on Xchange™ sensors installed.



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