

The Minos•X is a small vertical profiler that allows you to change the instrument's sensor load, in-the-field and on-demand. With the Minos•X, your SVPT can become a CTD; Shallow pressure sensors can be swapped for deep; and temperature range can be extended or tightened, as needed. One single profiler meets multiple deployment requirements.

Like all other X•Series instruments, the Minos•X uses Xchange™ field-swappable sensors, now available for conductivity, sound velocity, temperature, pressure, dissolved oxygen and turbidity. This means that sensor-heads can be shared with other instruments, regardless of instrument size or type. Total flexibility – of instrument model, of sensor type, and of sensor range – ensure that the right instrument is always available.

Field-swappable sensors also streamline recalibration: instead of sending the entire instrument back to a recalibration centre, calibrated sensor-heads can be sent to the instrument. Changing sensors is easy: simply unscrew one sensor-head and replace it with another.

Half the size of a Plus instrument, the Minos•X is designed for vertical profiling in tight spaces like launches or boats. The instrument includes a shackle and sensor cage, as well as an LED status indicator to simplify deployment preparation. High-speed 25Hz sampling ensures excellent data resolution. The Minos•X can be ordered with up to 2 analog or 1 digital channels, for use with 3rd party sensors.



C•Xchange™



SV•Xchange™



P•Xchange™



T•Xchange™



DO•Xchange™



Turbidity  
•Xchange™

## Key Benefits:

- Greater return on investment: Each instrument can multi-task as CTD or SVTP, at multiple pressure ranges, assuring greater usage.
- 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.
- Reduction in transport and logistics costs: Instruments can be recalibrated without return to a calibration centre.
- Greater system redundancy: Mobility of sensor-heads and modularity of instruments minimizes the risk of downtime on the vessel.
- Streamlined management: Less time spent administering instrument recalibration and certification requirements.

## Xchange™ and X•Series:

- Each Xchange™ sensor-head includes its own embedded calibration
- Sensors exchange easily without use of speciality tools
- Swap any sensor with another sensor of its own kind, regardless of range
- Exchange conductivity with sound velocity, regardless of range
- Exchange pressure with temperature, dissolved oxygen and turbidity regardless of range

## Electrical:

- LED light indicates if the battery is low and when instrument is operating
- Gigabyte non-volatile memory (expandable)
- Up to 25 scans per second
- Real time clock
- 7.5 to 26 VDC (external)
- Auto detect RS232 or RS485
- Optional additional channels (2 analog or 1 digital)
- Auto shut-down in low battery conditions

## Mechanical:

- Housing & Endcap: Delrin to 1000 m or Titanium to 6000 m
- Stainless steel shackle point and sensor protection cage
- Size: 75.7 mm (2.98") diameter x 566 mm (22.3") OAL
- Connector: Subconn Micro 8, Female
- Storage Temperature: -20°C to 60°C
- Operating Temperature: -20°C to 45°C

## Sampling Modes:

- User configurable (by time, by pressure, by sound speed)

## Power:

- Rechargeable Lithium-Ion battery pack

Parameter	Range	Precision	Accuracy	Resolution	Response
<b>Xchange™</b>					
C•Xchange™	0 to 70 mS/cm	+/-0.003mS/cm	+/-0.01mS/cm	0.001mS/cm	25ms at 1m/s flow
SV•Xchange™	1375 to 1625 m/s	+/-0.006 m/s	+/-0.025 m/s	0.001 m/s	47 microseconds
P•Xchange™	Up to 6000 dBar	+/-0.03%FS	+/-0.05%FS	0.02%FS	10 milliseconds
T•Xchange™	-2 to 32°C	+/-0.003°C	+/-0.005°C	0.001°C	100 milliseconds
**DO-Xchange™	0 to 50 mg/L		<5%mg/L	0.1mg/L	1s
**Turbidity-Xchange™	up to 6000 NTU	up to +/- 3%NTU	up to +/- 3%NTU	up to 0.5NTU	<0.7s (3s to 95%)
*Salinity (Calculated)	0 to 42 psu	+/-0.06psu	+/-0.01psu	0.001psu	
*Density (Calculated)	990 to 1230kg/m <sup>3</sup>		+/- 0.027kg/m <sup>3</sup>	0.001kg/m <sup>3</sup>	

X•Series instruments do not come with sensor-heads; please order them separately.

\*Calculated parameters are based on C•Xchange™, T•Xchange™ and installed pressure sensor. Other ranges are available; please contact us. All specifications subject to change without notice.

\*\*Pre-release specifications - final specifications to be determined.

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