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, and Pressure. 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.
### 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 specialty 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, 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

### Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
<th>Precision</th>
<th>Accuracy</th>
<th>Resolution</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>C•Xchange™</td>
<td>0 to 70 mS/cm</td>
<td>+/-0.003 mS/cm</td>
<td>+/-0.01 mS/cm</td>
<td>0.001 mS/cm</td>
<td>25 ms at 1 m/s flow</td>
</tr>
<tr>
<td>SV•Xchange™</td>
<td>1375 to 1625 m/s</td>
<td>+/-0.006 m/s</td>
<td>+/-0.025 m/s</td>
<td>0.001 m/s</td>
<td>47 microseconds</td>
</tr>
<tr>
<td>P•Xchange™</td>
<td>Up to 6000 dBar</td>
<td>+/-0.03% FS</td>
<td>+/-0.05% FS</td>
<td>0.02% FS</td>
<td>10 milliseconds</td>
</tr>
<tr>
<td>T•Xchange™</td>
<td>-2 to 32°C</td>
<td>+/-0.003°C</td>
<td>+/-0.005°C</td>
<td>0.001°C</td>
<td>100 milliseconds</td>
</tr>
<tr>
<td>Salinity (Calculated)*</td>
<td>0 to 42 psu</td>
<td>+/-0.06 psu</td>
<td>+/-0.01 psu</td>
<td>0.001 psu</td>
<td></td>
</tr>
<tr>
<td>Density (Calculated)*</td>
<td>990 to 1230 kg/m³</td>
<td>+/-0.027 kg/m³</td>
<td>+/-0.027 kg/m³</td>
<td>0.001 kg/m³</td>
<td></td>
</tr>
</tbody>
</table>

X•Series instruments do not come with sensor-heads; please order them separately. Calculated parameters are based on C•Xchange™, T•Xchange™ and P•Xchange™ sensor-heads. Other ranges are available; please contact factory. All specifications subject to change without notice.