



# SWALE OCEANOGRAPHIC

## X-TP sensor & Inductive Modem\*

For Tilt, Pressure and Temperature measurement



The X-TP is an expendable Temperature, Pressure and tilt sensor. It communicates with the surface along the wire rope using Sea-Bird compatible inductive telemetry.

The X-TP is extremely small, lightweight and robust. It can be positioned at any point on the wire. The sensor is fixed securely in place with a backside wire clamp available for several wire sizes.

The X-TP is highly cost effective, making it ideal for expendable profiling drifters or similar applications requiring high resolution profiles with high accuracy and stability.

The internal battery allows 1100 days of hourly sampling when new, or over 750 days after 4 years of storage. The sensor can output single measurements of temperature, pressure and tilt, or pressure and 3-axis acceleration sampled at up to 50 Hz for short time periods.



## Specifications

### Temperature

Range:	-5 to +45°C		
Initial Accuracy:	±0.005°C (-5 to +35°C)		
Stability:	0.00025°C/month		
Resolution:	0.0001°C		
Time constant:	800 milliseconds (still water)		

### Pressure (optional)

Range:	20 dBar	or	100 dbar
Accuracy (absolute)	± 0.2 dBar		± 1 dBar
Resolution:	0.003 dBar		0.01 dBar

### Tilt

Range:	0 to 180° (± 2g acceleration)
Accuracy:	± 2° (+/- 25 mg)
Resolution:	0.1° (0.1mg / 0.15mg/rtHz)

**Battery:** not replaceable

**Housing:** PET,

**Depth rating** 250 metres

**Dimensions:** 130 mm (L) x 33 mm x 28 mm

**Weight:** 105 grams (in air) / 35 grams (in seawater)

# SWALE TECHNOLOGIES Ltd

Unit 51G, Rm48 Whitehill & Bordon Enterprise Park, Budds Lane, Bordon, GU35 0FJ, UK  
Tel: +44 (0)1420 473334 Email: [Sales@swaletechnologies.com](mailto:Sales@swaletechnologies.com) [www.swaleocean.co.uk](http://www.swaleocean.co.uk)