

XR-420 CT

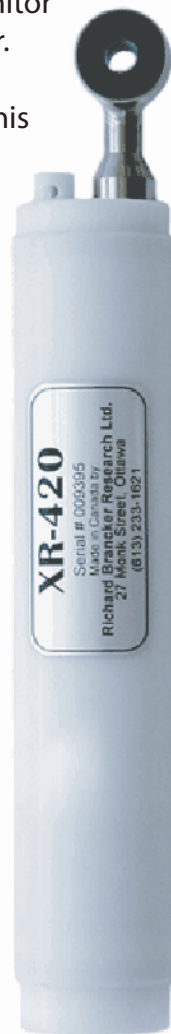
Conductivity and Temperature Logger

Features:

- High Accuracy
- Large Memory
- Low Power
- High-speed Data Download

The XR-420 CT Marine is a small (400 mm x 64 mm OD), autonomous data logger designed to monitor conductivity and temperature in sea water. The normal conductivity range of 0 to 70 mS/cm is measured by an inductive cell. This cell is a three-coil system with a closed loop feedback for superior temperature compensation and measurement accuracy (± 0.003 mS/cm). The titanium housing provides a depth rating for the cell of 6,600 m. It also provides shielding and stable cell geometry. The response time of the inductive cell is less than 95 milliseconds, which along with a large channel size and axial flow option, allows for long-term operation without an additional flow pump.

The XR-420 CT Marine is available in two casings: plastic and titanium. The depth rating of the plastic housing is 740 m, and the depth rating for the titanium housing is 6,600 m (limited by conductivity cell).



8MB of nonvolatile flash memory provides sufficient memory for 2,400,000 readings, which can be logged on one set of high-powered 3V lithium batteries. The batteries are common camera batteries (CR123A), which are readily available. Power consumption can vary significantly depending on the sampling rate, and operating temperature. A fresh set of batteries will usually permit collection of a full complement of readings over periods exceeding one year.

Technical

Base Logger

Power:	QTY 4, 3V CR123A cells
Communications:	RS-232/485; logged, cable, or telemetry
Download Speed:	~115,000 samples/minute
Clock Accuracy:	± 32 seconds/year
Size:	290mm x 64mm
Memory:	8Mbyte Flash (2,400,000 samples)
Calibration:	NIST traceable standards

Temperature

Range:	-5 °C to 35 °C; extended range to -40 °C
Accuracy:	± 0.002 °C
Resolution:	<0.00005 °C
Time Constant:	depends on probe construction

Conductivity

Range:	0 to 70 mS/cm
Accuracy:	± 0.003 mS/cm
Resolution:	<0.0001 mS/cm
Time Constant:	< 95msec

For more details, please visit our website: www.rbr-global.com

Software

The XR-420 use fully integrated RBR Windows® software, which is compatible with Windows® 95/98/NT/2000/XP. Please see the "RBR Logger Software" datasheet, or visit the RBR website (www.rbr-global.com) for more information.

RBR Ltd.

27 Monk Street, Ottawa, ON Canada K1S 3Y7
 ph: +1-613-233-1621 fax: +1-613-233-4100
info@rbr-global.com www.rbr-global.com

RBR Europe GmbH

Schultenstrasse 8, 59597 Erwitte, Germany
 ph: +49-2943-974270 fax: +49-2943-974276
info@rbr-europe.com www.rbr-europe.com