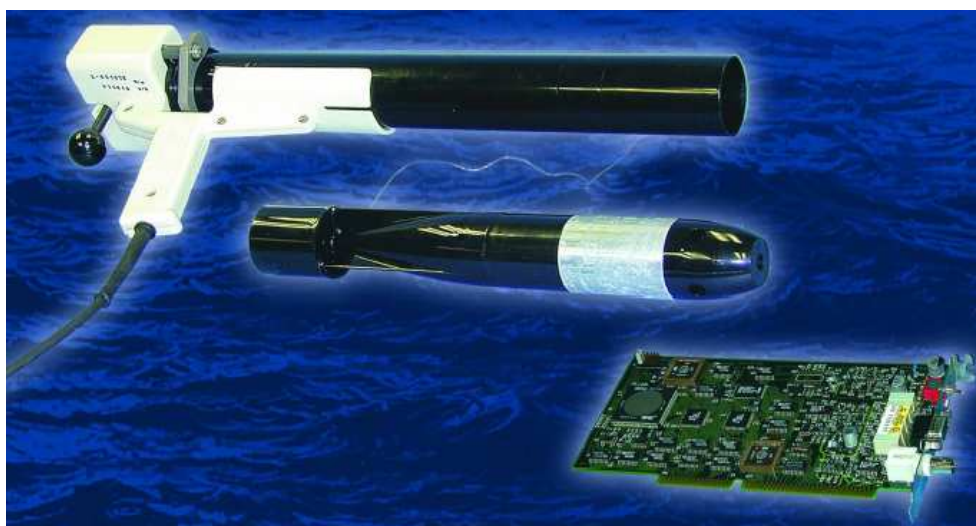


PRODUCT DATA SHEET

OCEANOGRAPHIE

XCTD

Expendable Conductivity/Temperature/Depth Profiling System



| Technical specifications | | | |
|--------------------------|---------------|-------------|-------|
| Sensors | Conductivity | Temperature | Depth |
| Range | 0 to 70 mS/cm | .01°C | 17 cm |
| Accuracy | ±.03 mS/cm | ±.02°C | 2% |
| Response Time | 40 mSec | 100 mSec | |

The Digital XCTD is calibrated at three temperatures and three conductivities during the manufacturing process.

The Expendable Conductivity/ Temperature/Depth (XCTD) Profiling System is an accurate and cost-effective means to collect salinity profiles while underway. The system consists of the Digital XCTD probe, developed by the Tsurumi Seiki (TSK) Co. Ltd. Of Yokohama, Japan and Lockheed Martin's representative and licensed manufacturer of XBTs in Japan. Three models of XCTD are available for different depths and ship speeds.

Digital XCTD

The Digital XCTD uses an inductive conductivity sensor, thermistor and microprocessor based battery-powered circuitry to internally compute and average the temperature and conductivity. The data is transmitted digitally up the wire as a coherent DPSK on an 800 Hz square wave. The Digital XCTD is calibrated at three temperatures and three conductivities during the manufacturing process. These calibration coefficients are stored in the probe and used internally to compute the temperature and conductivity prior to data transmission. The MK21 ISA/USB system processes and displays the conductivity and temperature profile in real time and provides a calculated salinity profile once data acquisition is complete. The MK21 software also provides the capability to do post trace analysis as well as calculate a sound velocity profile.

Models

- XCTD-1
 - 1000 m at 12 knots
- XCTD-2
 - 1850 m at 3.5 knots
- XCTD-3
 - 1000 m at 20 knots

An accurate and cost-effective means to collect salinity profiles while underway

