STAR ODDI
Logging Life Science

DST CTD online

Online Conductivity, Temperature and Depth Sensor

Mini CTD salinity sensor for connection to embedded systems. Wide salinity range.

Conductivity (CTD) sensor connection port for subsea device integration. For both short or long-term oceanographic surveys.

Key features

- Smallest online conductivity sensor on the market
- Real time data or data retrieval after surveying
- Fully submersible rugged design
- Wide salinity range
- Pressure sensors from shallow to deep ocean

Required accessories

Starcom PC cable, Female connector, SeaStar Windows software.

Technical specifications

Sensors	Conductivity (salinity), temperature, pressure (depth)*
Size (Diameter x Length)	22.4 mm x 80 mm
Housing Material	Ceramic and 3M Scotchcast 2131 molding
Weight	60 in air
Data Resolution	12 bits
Conductivity Ranges	Wide range: 2-68 mS/cm; Low range: 0.1-6 mS/cm
Conductivity Resolution	Range 2-68 mS/cm: 0.03 mS/cm; Range 0.1-6 mS/cm: 0.003 mS/cm
Conductivity Accuracy	Range 2-68 mS/cm: +/-1.5 mS/cm, Range 0.1-6 mS/cm: +/-0.15 mS/cm
Salinity Range	Depends on conductivity and temperature range (consult with Star-Oddi)
Salinity Resolution	Range 2-68 mS/cm: 0.02 PSU*;Range 0.1-6 mS/cm: 0.0005 PSU*
Salinity Accuracy	Range 2-68 mS/cm: +/-1 PSU*; Range 0.1-6 mS/cm: +/-0.1 PSU*
Temperature Range	-1°C to +40°C (30°F to 104°F)
Temperature Resolution	0.032°C (0.058°F)
Temperature Accuracy	+/-0.1°C (0.18°F)
Temperature Response Time	Time constant (63%) reached in 20 sec.
Standard Depth Ranges	150m, 500m, 1200m, 2400m
Depth Resolution	0.03% of selected range
Depth Accuracy	+/-1% of selected range
Depth Response Time	Immediate
Pressure Tolerance	Depends on pressure sensor selected. Max 2500 m
Data Streaming Interval	1 second or wider (user defined)
Power Requirements	Vcc = 3.3V to 3.6V DC supply from user's system. Power draw typically 3.5 mA when taking a measurements. Power draw max 5 mA.
Embedded System Hardware Connection	1. Direct to a microprocessor, 3.3V to 3.6V Vcc, where the RC232 port operates at 0-Vcc, and the resting voltage is high (=Vcc). 2. If the embedded system comes with a USART, i.e. a RS232 port with -Vp to +Vp, a transceiver chip is needed for voltage level adjustment and signals inversion. The Vp can range from 5 to 12V.
Communication Protocol	RS232
Clock	Real time clock. Accuracy +/-1 min/month.
Computer Interface	9 pin RS232 Starcom cable is supplied w/USB serial converter
Cable Connector	SubConn MCIL4M (Micro Circular In-Line 4-Pin Male) on subsea cable and a locking sleeve. Matching female connector MCBH4F is also supplied.
Cable Length	Standard length 0.6 m. Longer subsea cables can be provided, up to max 25 m.
Software	User's own software and/or Star-Oddi's SeaStar for Windows.

*CT online version available, skipping pressure (depth) sensor.
**Based on conductivity full scale accuracy at 24°C.
Warranty: 12 months.
Specifications may change without notice.