



IDRONAUT OCEAN SEVEN 307 EDUCATION CTD MODULES

OEM SMART LOW-POWER CTD SENSOR DIGITAL INTERFACES

The OCEAN SEVEN 307 CTD digital OEM modules make it easy to interface the full ocean IDRONAUT Conductivity, Temperature and Pressure sensors with third-party equipment, via the built-in RS485 digital interface and a simple communication protocol. The modules have high-accuracy and high-resolution preamplifiers and the processing power needed to provide, in real time and through the RS485 interface, the digital output in engineering units. The module preamplifiers are temperature compensated thus further enhancing the measurement accuracy. The modules can be connected together to create an “RS485” network of intelligent sensor.

Four different OEM modules are available:

- ☞ **Conductivity.**
- ☞ **Temperature.**
- ☞ **Combined pressure and temperature.**
- ☞ **High precision 0.01% pressure.**

Pressure and Temperature combined module

Parameter	Range	Initial Accuracy	Resolution
Pressure	0..100 bar	± 0.05 % F.S.	0.002 % F.S.
Temperature	-5..+30 °C	± 0.003 °C	0.001 °C
	+30..+105 °C	± 0.030 °C	0.001 °C ⁽¹⁾

(1) Electronic module max. working temperature +70°C

Temperature module

Parameter	Range	Initial Accuracy	Resolution
Temperature	-5..+30 °C	± 0.003 °C	0.001 °C
	+30..+105 °C	± 0.030 °C	0.001 °C ⁽¹⁾

(2) Electronic module max. working temperature +70°C

Conductivity module

Parameter	Range	Initial Accuracy	Resolution
Conductivity	0..+70 mS/cm	± 0.002 mS/cm	0.001mS/cm

Module common specifications:

Power supply:	3.6..5 VDC nominal 3.6VDC
Power consumption:	10..20 mAh @ 3.6VDC
Sampling rate:	4 Hz
Data interface:	RS485
Communication interface:	SSP proprietary protocol

High precision pressure module

Parameter	Range	Initial Accuracy	Resolution
Pressure	0..1000* bar	± 0.01 % F.S.	0.001 % F.S.

Specifications:

Ranges available are:	1, 4, 10,40,100,200,400,700,1000 bar
Power supply:	8..28 VDC nominal 12.0VDC
Power consumption:	10 mAh @ 12.0VDC
Sampling rate:	100 Hz
Data interface:	RS485
Communication interface:	MODBUS protocol

