CTD OEM Sensor

ACTD-OEM

ISO9001
JQA0950

Easy integration on different platforms

- Conductivity, temperature and pressure OEM sensors
- Digital output (RS-232C, RS-485 and 3.3V logic UART)
- Compact, robust and accurate sensors

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JFE Advantech Co., Ltd.

CTD OEM Sensor

ACTD-OEMR
ACTD-OEMD
ACTD-OEMU

■ Description

The CTD OEM Sensor is designed to be integrated into various types of platforms and allows for measurements of conductivity, temperature and pressure. The conductivity sensor has 7 electrodes with both ends of the sensor having same polarity, ensuring that no interference is caused to the sensor by the proximity of metals or any kind of material. Adding to that, its compact size allows this sensor to be integrated in a variety of platforms. Three models are available with different communication protocols: ACTD-OEMR (RS-232C), ACTD-OEMD (RS-485) and ACTD-OEMU (3.3 V logic UART).

■ Sensor Specifications

Sensor	Conductivity	Temperature	Pressure
Measurement range	0.5 to 70 mS cm^{-1}	-3 to 45 °C	0 to 2000 dbar
Accuracy	±0.01 mS cm^{-1} (1)	±0.01 °C（0 to 35 °C）	±0.1% FS
Resolution	0.001 mS cm^{-1}	0.001 °C	0.001 dbar

(1) Calibration using seawater (from 28 to 65 mS cm^{-1}).

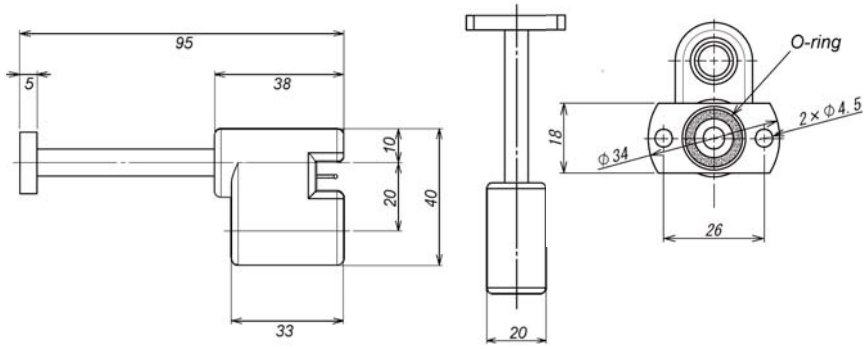
■ Instrument Specifications

Communication	RS-232C (ACTD-OEMR), RS-485 (ACTD-OEMD) and 3.3 V logic UART (ACTD-OEMU).	
A/D converter	16 bit digital conversion	
Sampling frequency	10Hz	
Operating voltage	DC 12 to 24 V	
Power consumption	35 mA (1) / 45 mA (2)	
Materials	Flange and sensor shaft: titanium (grade 2)	
Dimensions (CT sensor)	Circuit board	L102 mm x W45 mm x H14.7 mm
	Sensor	L18 mm x W34 mm (flange) / L38 x W40 mm (head)
Dimensions (Pressure sensor)	Circuit board	L26 mm x W17 mm
	Sensor	Φ13 mm x W8 mm
Weight	103 g (sensors + circuit board)	
Depth rating	2000 m depth equivalent (sensor only)	
Cable length	Between the sensor and circuit board	21 cm (standard)
	External (from the circuit board)	38.5 cm (standard)

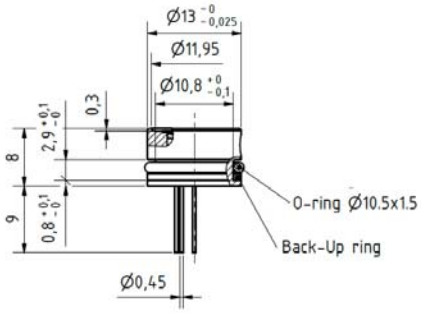
(1) in air at 25℃
(2) in water at 25℃ and 50 mS cm^{-1}

■ Drawings

Conductivity and temperature sensor



Pressure sensor



※ Dimensions are in mm. ※ All specifications on this leaflet are subject to change without notice

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