TEMPERATUR SENSOR 4880/4880R

TEMPERATURE SENSOR 4880/4880R
is a compact fully integrated sensor for measuring the water temperature. The sensor is designed to be mounted on the AADI SEAGUARD® Platform and in other measurement systems.

Temperature Sensor 4880/4880R advantages:

- Smart Sensor technology
- Plug and Play Sensor
- Low current drain
- Calibration coefficients are stored in the sensor
- Depth rating 300 meters
- Short response time, less than 2 seconds
- Low maintenance needs
- Resolution: 0.001°C
- Accuracy: ±0.03°C
- Output formats 4880: AiCaP CANbus, RS-232
- Output formats 4880R: RS-422
- Real-Time XML output
- Short update interval: 1 second to 255 minutes

The Temperature Sensor 4880 is a member of the AADI smart sensor familie designed to be used on AADI SEAGUARD® Platform as well as in other measurement systems.

The sensor is based on a thermistor bridge. A Digital Signal Processor controls the sampling of the bridge and calculates the calibrated temperature in engineering units.

Since all calibration and temperature compensation data are stored inside, the parameters are by default presented directly in engineering units without any external calculation. The sensor also provides raw data of the temperature measurements.

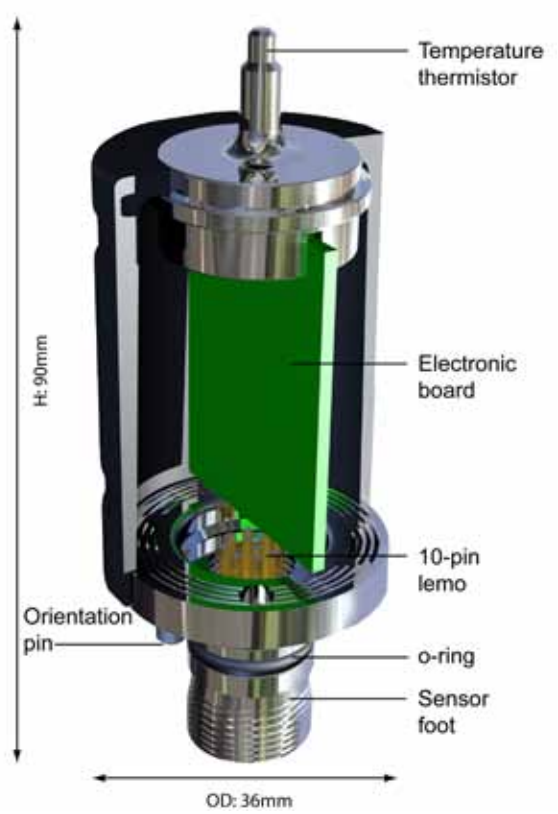
The SEAGUARD® Platform and the smart sensors are interfaced by means of a reliable CANbus interface using an XML based protocol (AiCaP). The Smart sensors can be mounted directly on the Top-end plate of the AADI SEAGUARD® and are automatically detected and recognized.

The output parameters from the SEAGUARD® applications are easily presented in SEAGUARD Studio.

The output format of the 4880 are AiCaP CANbus and RS-232, while the output format of the 4880R version is RS-422. The sensor version must be specified when ordered as the two versions are not interchangeable. The R-version can not be used in SEAGUARD® applications.

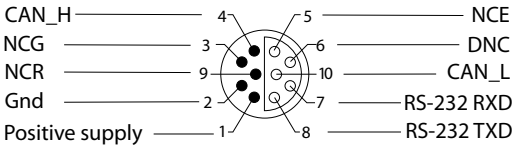
The sensor can be used as stand-alone sensor with AADI Real-Time Collector for real-time data.

Specifications for 4880/4880R



PIN CONFIGURATION for sensor 4880

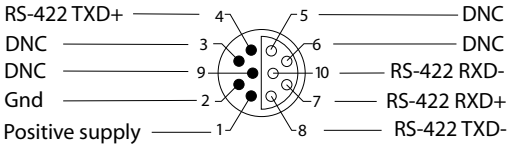
Receptacle, exterior view; pin = • bushing = ∘



DNC = DoNotConnect

PIN CONFIGURATION for sensor 4880R

Receptacle, exterior view; pin = • bushing = ∘



DNC = DoNotConnect

Temperature:	
4880/4880R Range:	-4 to +36°C (24.8 – 96.8˚F)
Resolution:	0.001°C (0.0018˚F)
Accuracy:	±0.03°C (0.0054˚F)
Response Time (63%):	<2 sec
Output format:	**4880:** AiCaP CANbus, RS-232(1) **4880R:** RS-422(1)
Output interval:	**RS-232/RS-422:** 1s – 255 minutes **AiCaP:** Controlled by SEAGUARD®
Supply voltage:	5 to 14VDC
Current drain(@ 9V):	
Maximum:	50mA
Quiescent:	0.2mA
Average:	**AiCaP mode:** 0.2mA + 3.1mA/S **RS-232 mode:** 0.2mA + 3.3mA/S **RS-422 mode:** 1.0mA + 3.3mA/S where S is the sampling interval in sec
Operating temperature:	-5 – +40˚C (23 – 104˚F)
Operating depth:	0 - 300m (0 - 984.3ft)
Electrical connection:	10-pin receptacle mating plug CSP
Dimensions:	OD: 36 x 90mm (OD:1.4”x3.6”)
Weight:	138g (4.86oz)
Material:	Stainless steel, ABS/PC, pom, epoxy casting
Accessories:	
not included:	RS-232 CSP free end cable 4762 RS-232 CSP to PC cable 4865 RS-422 CSP free end cable 4763 RS-422 CSP to PC cable 4899 Real-time license and Collector 4715

(1) 9600 baud, 8 data bits, 1 stop bit, No parity, Xon/Xoff Flow control

The above specifications are for the stand-alone sensor only, not the installation it is utilized with.

Specifications subject to change without prior notice.

AADI Real-Time

The data message from the sensor is in XML format. A user application can access the AADI Real-Time Collector over the Internet or Intranet. Each user application will experience an individual connection due to a queue management system in the collector. The license includes AADI Real-Time Collector, AADI Real-Time Viewer, Style Sheets and example application (See B163).

Latest version on internet

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