The Temperature Sensor 4050 is an intelligent sensor designed to be used on Aanderaa Dataloggers 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. The sensor is housed in a rugged titanium cylinder.

The processed data is available as either RS-232 or Aanderaa SR10 output. The user may configure the measurement range on the SR10 output; best accuracy is achieved with a short measurement range.

The sensor can be mounted directly on the top end plate of the Aanderaa RCM 9 or RCM 11 and connected to the Main Control Board (Electronic Board) with a short cable, Sensor Cable 3854.

The sensor can also be connected to the Top-end Plate via a cable/string for temperature measurements in a different site than the instrument.

The 10-pin receptacle in the sensor foot mates with Aanderaa CSP (Cylindrical Sealing Plug) giving access to RS-232 output.

For connection to a Personal computer (PC) Sensor Cable 4865 can be used. It is furnished with a watertight 10-pin plug at the sensor end. An additional USB plug is used for providing power to the sensor.

Temperature Sensor 4050 advantages:
- Smart sensor technology
- Configurable range for improved accuracy when used with Aanderaa current meters
- Depth rating of 6000 meters
- Short response time, less than 2 seconds
- Rugged and Robust with minimal and low maintenance needs
- Resolution: 0.001ºC
- Accuracy: ±0.03ºC
- Output format: Aanderaa SR10, RS232
Temperature:
Range: -4 to 36°C (24.8 – 96.8˚F)
Resolution: 0.001°C (0.0018°F)
Accuracy: ±0.03°C (0.054°F)
Response Time (63%): <2 sec
Output format: Aanderaa SR10, ASCII RS-232
Sampling Interval: 2 sec – 255 min
(SR10 Controlled by Datalogger)
Supply voltage: 6 to 14Vdc (SR10 -6 to -14Vdc)
Current drain (9V):
Average: RS-232:14mA/S +0.25mA
where S is sampling interval in seconds SR10: 3 mA/T where T
is recording interval in minutes
Maximum: 50 mA
Quiescent: 0.25 mA (SR10, 0mA)
Operating temp.: -5 to +40˚C (23 – 104˚F)
Electrical connection:
10-pin receptacle mating CSP
(Cylindrical Sealing Plug)
Dimensions (DxH): O.D.36 x 76mm (O.D1.4”x3”)
Weight: 120g (4.23oz)
Materials: Titanium and Epoxy coating
Accessories:
included: Sensor Cable 3854
not included: RS-232 CSP free end cable 4762
RS-232 CSP to PC cable 4865
Real-time Collector 4715 and license

Ordering information:
Remember to select Operating Depth (SW, IW or DW) when ordering Temperature Sensor 4050.