FEATURES

- Submersible, Rugged, Wide Temperature Range Probe suitable for use in harsh environments.
- 304 Stainless Steel Probe, from 1.5 to 12 inches in length.
- Pressure tested, water resistant to 60 PSI.
- All exposed surfaces are either stainless steel or Teflon based.
- Available with Dallas Semiconductor DS18B20 sensor.
- Uses 1-Wire communication protocol.
- Compatible with all EDS and Dallas Semiconductor 1-Wire bus masters.
- Chemical resistant and waterproof steel probe and cable.
- No external power required, or can be optionally powered for fast (non-parasite) operation.
- Automatically configures the VDD pin to the correct state.
- Automatic unique device addressing.
- 1-12 feet high temp stranded cable options.
- Applications include thermostatic controls, industrial systems, consumer products, thermometers, or any thermally sensitive system.

DESCRIPTION

The OW-TEMP-B3-12RA temperature probe is designed for wide temperature range applications requiring excellent chemical resistant properties and sensor submersion.

All exposed parts of the rugged temperature probe are manufactured of either stainless steel, or TPE based products, resulting in excellent chemical resistance properties to acids, alkanes, ketones, esters, aliphatics, aromatics, and outdoor exposure. The probe is constructed of 304 Stainless Steel making it both durable and water resistant to 60 PSI. The cable used on this sensor uses TPE based materials for both the outer jacket and inner conductor insulation. This cable is particularly suited for harsh environments, and offers excellent resistance to high and low temperatures, oil, gasoline, and sunlight exposure. This results in a robust sensor that can be submerged beyond the top of the steel probe.

The rugged temperature probe is comes with a DS18B20 1-Wire temperature sensor embedded into the probe. In manufacturing the temperature probe a special process is used that insures the internal sensor is thermally coupled to the steel tube wall; this helps ensure rapid thermal response to changing conditions.

Our rugged temperature probe is supplied standard with a RJ12 plug (commonly called RJ11) which makes the installation process much easier. The RJ12 pinouts are as follows:

Pin 3: 1-Wire Signal, Blue
Pin 4: Common (GND), White
Pin 6: Ext. Power (VDD), Orange, (connection not required)

The rugged temperature probes are directly compatible with all Embedded Data Systems and Dallas 1-Wire bus masters, our OneSix server software, and the freely available TMEX drivers. For complete documentation on the embedded DS18B20 sensor, please refer to manufacturer’s spec sheets available at http://datasheets.maxim-ic.com/en/ds/DS18B20.pdf.
CUSTOM CONFIGURATIONS
Our standard (stocked) RTP sensor has a 3 inch long steel probe and 12 foot long CAT 5 cable. With minimum orders we
can manufacture the temperature probe to a variety of specifications, including length of the steel probe, length of cable,
with / without RJ12 plugs, etc. Please contact us for a custom quote.

PART NUMBERS
Please use the following chart to determine the appropriate part number for ordering:

OW-TEMP ___ ___ ___ ___

Other
A - Automatically configures VDD pin (DS18B20 only)

Connection Type
R - RJ12 Plug (Standard)
Not Present - Bare Wires

Cable Length
# - 12' Standard (Enter Length in Feet 1' - 100' available)

Form Factor
F - foil tape
# - Probe - 3" Standard (Enter Length in Inches 3"-12" available)
W - Wall Mount

Internal Sensor Technology
B - DS18B20
S - DS18S20

Sensor Type
One Wire Temperature Sensor

Part # Examples:
OW-TEMP-B3-12RA Rugged probe sensor: DS18B20, 3" probe, 12' cable, RJ12 plug, auto VDD configuration
OW-TEMP-B12-12RA Rugged probe sensor: DS18B20, 12" probe, 12' cable, RJ12 plug, auto VDD configuration
OW-TEMP-B3-12A Rugged probe sensor: DS18B20, 3" probe, 12' cable, auto VDD configuration

SPECIFICATIONS

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