

Waterproof Probe Temperature Sensor

DS18B20/DS1820



Feature

The DS18B20/DS1820 waterproof temperature sensor is a digital thermoprobe with a stainless steel sheath, ideal for wet or harsh environments. It communicates over a 1-Wire interface, supports 9–12 bit temperature resolution, operates without an external power supply, and is identifiable via a unique serial code—making it ideal for multi-sensor applications like HVAC systems and industrial monitoring.

Specifications	
Model	DS18B20 / DS1820
Temperature Range	-55 °C to +125 °C
Accuracy	±0.5 °C (–10 °C to +85 °C)
Resolution	Configurable from 9 to 12 bits
Interface Type	1-Wire Digital
Conversion Time	Max 750 ms
Power Supply	3.0 V – 5.5 V or parasitic (via data line)
Sheath Material	Stainless steel
Probe Size	6 mm × 50 mm
Cable Length	1 m (custom lengths up to 4 m)
Use Cases	HVAC, environmental sensing, equipment monitoring, waterproof applications

Pinouts:

Pin Name	Type	Description
VCC	Power Input	Supply voltage (3.0–5.5 V), can be unused if using parasitic power
DATA	Digital I/O	1-Wire data communication line
GND	Power Ground	Common ground



Product Pictures:

