

## DS18B20 Waterproof Temperature Sensor Cable



### Product Description

This Maxim-made item is a digital thermo probe or sensor that employs DALLAS DS18B20. Its unique 1-wire interface makes it easy to communicate with devices. It can convert temperature to a 12-bit digital word in 750ms (max). Besides, it can measure temperatures from  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  ( $-67^{\circ}\text{F}$  to  $+257^{\circ}\text{F}$ ). In addition, this thermo probe doesn't require any external power supply since it draws power from data line. Last but not least, like other common thermo probe, its stainless steel probe head makes it suitable for any wet or harsh environment.

### Feature:

Power supply range:	3.0V to 5.5V
Operating temperature range:	$-55^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ ( $-67^{\circ}\text{F}$ to $+257^{\circ}\text{F}$ )
Storage temperature range:	$-55^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ ( $-67^{\circ}\text{F}$ to $+257^{\circ}\text{F}$ )
Accuracy over the range of $-10^{\circ}\text{C}$ to $+85^{\circ}\text{C}$ :	$\pm 0.5^{\circ}\text{C}$
3-pin 2510 Female Header Housing	



Waterproof Stainless steel sheath	
Stainless steel sheath	
Size of Sheath:	6*50mm
Connector:	RJ11/RJ12, 3P-2510, USB.
Pin Definition:	RED: VCC    Yellow: DATA    Black: G ND
Cable length:	1meter, 2m, 3m, 4m are available upon request.

**Application:**

The DS18B20 Digital Temperature Probe provides 9 to 12 bit (configurable) temperature readings which indicate the temperature of the device. Information is sent to/from the DS18B20 over a 1-Wire interface, so that only one wire (and ground) needs to be connected from a central microprocessor to a DS18B20. Power for reading, writing, and performing temperature conversions can be derived from the data line itself with no need for an external power source.

Because each DS18B20 contains a unique silicon serial number, multiple DS18B20s can exist on the same 1Wire bus. This allows for placing temperature sensors in many different places. Applications where this feature is useful include HVAC environmental controls, sensing temperatures inside buildings, equipment or machinery, and process monitoring and control.

**Details:**



Figure 1

Electronics Components datasheet

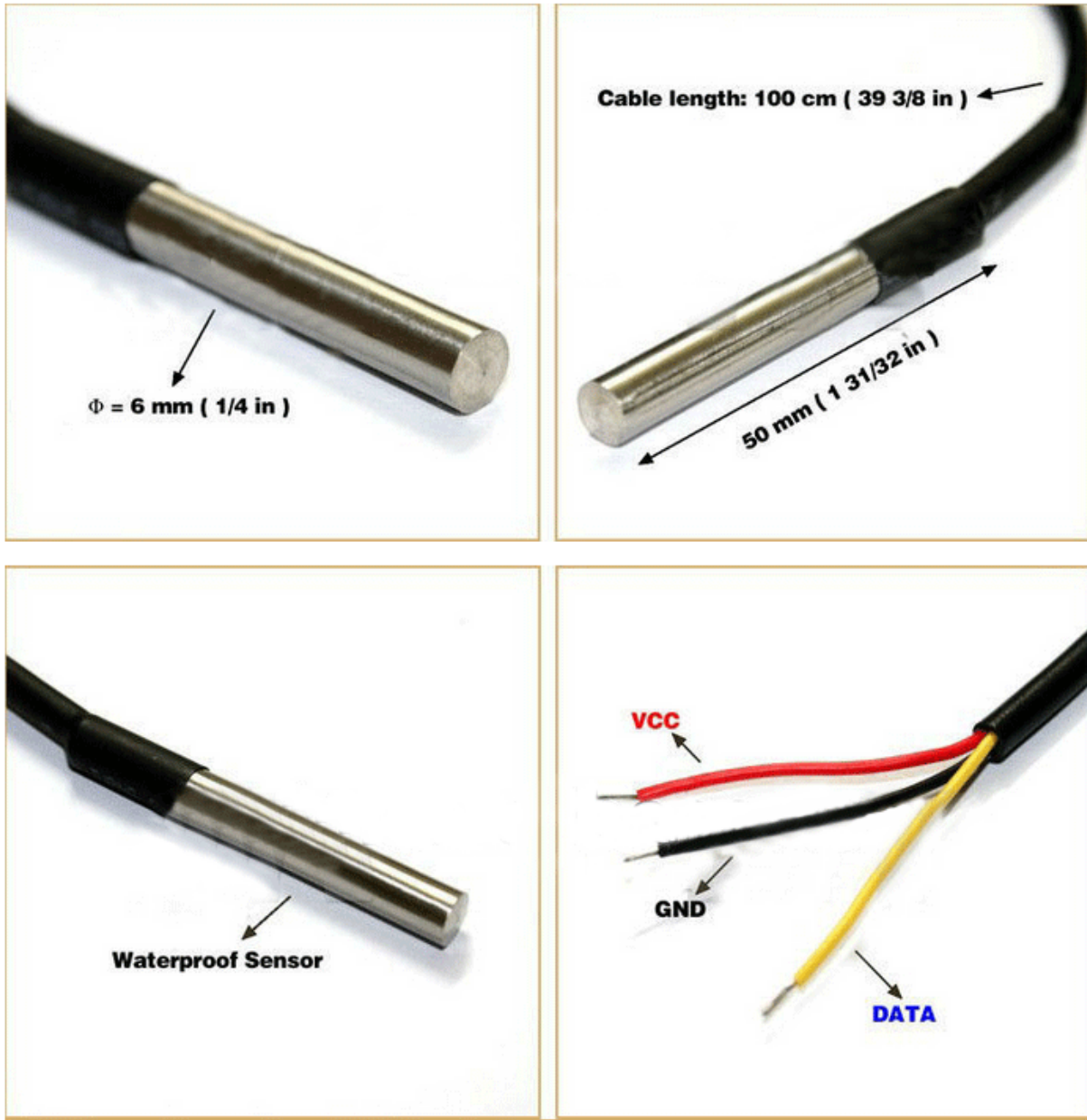


Figure 2