

# DS18B20 Temperature Sensor **GAIMC**

## GTS200



### DESCRIPTION

The probe adopts the new original imported DS18B20 temperature sensor chip. Each pin of the chip is separated by heat-shrinkable tube to prevent short circuit, internal sealing, waterproof and moisture proof. The high quality stainless steel tube package is waterproof, moisture proof and rust proof. The DS18B20 digital temperature sensor from Dallas Semiconductor of the United States is encapsulated with a highly thermally conductive sealant to ensure high sensitivity of the temperature sensor and minimal temperature delay. The temperature sensor supports a "one-wire bus" interface (1-Wire) with a temperature range of -55°C to +125°C and an accuracy of  $\pm 0.5^{\circ}\text{C}$  in the range of -10 to +85°C. The on-site temperature is directly transmitted in the digital way of "one-line bus", which greatly improves the anti-interference of the system. Suitable for on-site temperature measurement in harsh environments. The DS18B20 digital temperature sensor has a unique number, and the temperature acquisition device identifies the corresponding temperature sensor by number .

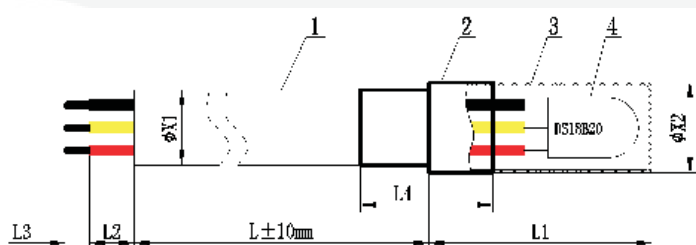
### FEATURES

- Power supply range: 3.0V to 5.5V
- Operating temperature range: -55 ° C to + 125 ° C (-67 ° F to + 257 ° F)
- Storage temperature range: -55°C to + 125°C (-67F to + 257F)
- Accuracy in the range of -10 ° C to + 85 ° C:  $\pm 0.5^{\circ}\text{C}$
- Waterproof stainless steel sheath
- Sheath size: 6 \* 50mm or custom

### APPLICATION

DS18B20 temperature sensor is mainly used in refrigerator temperature monitoring, pharmaceutical factory GMP monitoring system, telecommunication room monitoring, beer production, building automation, warehouse temperature monitoring, environmental monitoring, process temperature monitoring, air conditioning monitoring, incubation temperature control, aquaculture temperature measurement, greenhouse temperature monitoring.

## DIMENSIONS



1	Cable length, wire diameter OD	PVC cable*3P	OD5.0mm
2	Heat shrinkable tube size	Heat shrinkable tube	OD6*30mm
3	Probe size	Stainless steel probe	OD6*30mm
4	DS18B20 sensor		Red VDD is the external power supply input The yellow DQ is a digital signal input / output terminal Black GND is the power ground

## PARAMETERS

Digital chip	1DS18B20
Probe size	Φ 8mm, φ6mm (inside), length = 30mm or custom
Insulation Materials	Glass fiber, PVC, Teflon, silicone rubber or custom made
Wire material	FRP, PVC, Teflon, silicone rubber, stainless steel braided
Shell material	Stainless steel · nickel plated copper, brass, plastic
Wire Connector	UL Series (such as UL1007), Supply wire number, using temperature range, outside diameter and material requirements.
Special requirements	Molex, JST, DuPont, CWB, CJT, SM, TJC3, PH, EH, 5264, U-type etc.
Wiring	Waterproof, acid proof, antiseptic
	Black: GND Yellow: DATA Red: VDD+

## ORDER INSTRUCTION

When you placing order, please inform us the following parameters:

1. Application and working environment (whether to be waterproof, acid or alkali and others)
2. Shell diameter D and length L (commonly size: 6 \* 30mm, 6 \* 50mm, other can be customized)?
3. How many lines of output? (Commonly used 2-wire/ 3-wire, choose one) ?
4. Wire material and length (commonly wire PVC, Silicone, Teflon wire)?
5. Temperature range (temperature range cannot exceed -50 to +125 °C )?
6. How to deal with the cable end (hanging tin or with connector)?