

## Air-Plug Temperature Sensor

### SLST1-14

- (1) Plug and Play, metal air connector
- (2) For occasions that require a fixed installation
- (3) Threaded front end comes, you can tighten the installation
- (4) Internal sensor pad metal film technology
- (5) Sensors with high sensitivity, minimum temperature delay
- (6) "Bus line" digital transmission
- (7) System interference is high, the temperature field for harsh environments



### Product Overview

SLST1 series digital temperature sensor used by the U.S. Dallas Semiconductor digital temperature sensor DS18B20, stainless steel housing the sensor package, waterproof. Specially designed stainless steel sensor housing, the wall thickness of only 0.15mm, with a small storage of heat, molding to the metal pad DS18B20 full contact with the stainless steel wall, while using a high thermal conductivity potting sealant to ensure that the temperature sensor high sensitivity, minimum temperature of delay.

SLST1 temperature sensor support "bus line" interface (1-Wire), measurement temperature range is  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ , at  $-10 \sim 85^{\circ}\text{C}$  within an accuracy of  $\pm 0.5^{\circ}\text{C}$ . Temperature directly to the scene "bus line" means the number of transmission, greatly improves the system's interference. Harsh environment of the site is suitable for temperature measurement. SLST1 digital temperature sensor has a unique number, the temperature acquisition device identified by numbers corresponding to the temperature sensor. Sensor lead length can be customized according to user needs, special sensor lead wires with 3-pin, 1 meter length of the factory.

### Applications

- 1, cold storage temperature monitoring
- 2, the pharmaceutical GMP monitoring system
- 3, the telecommunications room monitoring
- 4, beer production
- 5, building automation
- 6, storage temperature monitoring
- 7, environmental monitoring
- 8, process temperature monitoring
- 9, air monitoring

No.	Project	Content
1	Built-in sensor	DS18B20
2	Temperature accuracy	$\pm 0.5\text{ }^{\circ}\text{C}$ ( $-10^{\circ}\sim +85^{\circ}\text{ }^{\circ}\text{C}$ range)
3	Temperature range	$-55^{\circ}\text{C}\sim +125^{\circ}\text{C}$
4	Temperature resolution	9-12 bit ( $0.0625\text{ }^{\circ}\text{C}$ )
5	Temperature rate	750ms (12 bit resolution)
6	Power Requirements	3V-5.5V
7	Support the communication cable length	>100m
8	Operating Environment	$-55^{\circ}\text{C}\sim +80^{\circ}\text{C}$
9	Material	304 stainless steel
10	Dimensions	See size chart

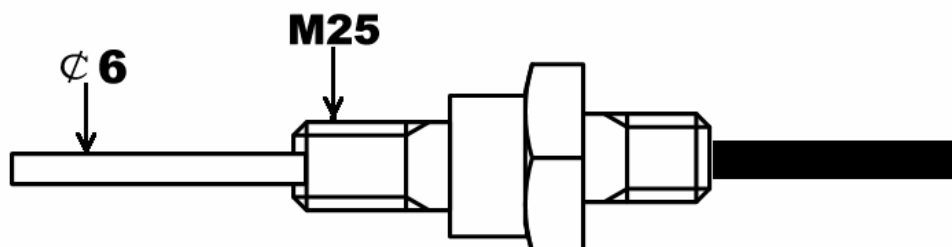
## Pin Definition

Red --- VCC power is, then the positive 5V DC

white --- DQ signals

Black --- GND power the negative, then negative DC 5V

## Dimensions



## Communication protocol

Dallas Semiconductor America (DALLASSEMICONDUCTOR) specific to a single bus (1-Wire Bus) technology uses a single signal line, can transmit the clock, and can transfer data, but data transmission is bidirectional, so that a single bus line simple, less hardware overhead, low cost, easy expansion and maintenance and so on the bus.

## Similar selection

			
SLST1-1 Industrial-type	SLST1-2 mount	SLST1-3 shielded	SLST1-4 dedicated refrigerator
			
SLST1-5-specific soil	SLST1-6 Industrial lengthened	SLST1-7 shield elongated	SLST1-8 deep detection
			
SLST1-9 installation lengthened	SLST1-10 plug-in	SLST1-11 channels dedicated	SLST1-12 SMD type
			
SLST1-13 SMD-type ceramic	SLST1-14 aircraft Plug-type	SLST1-15 bearing special	SLST1-16 mine-specific

## Ordering Information

No.	Model	Order	Remarks
1	SLST1-14	SLST1-14-01	SLST1-14-01 in the 01 Table 1 meter length



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