

## Product model

TSC250905-32

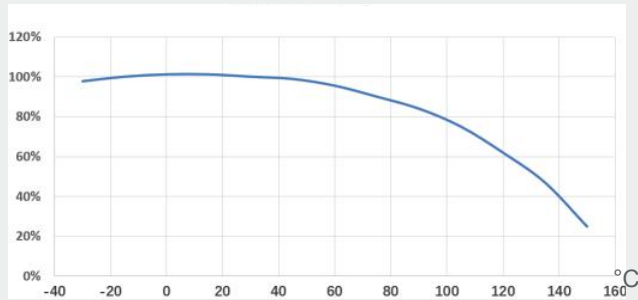
## Product introduction

The TSC250905-32 is a Passive wireless temperature sensor , temperature sensor specially designed for metal and the other complex environments.Which has characters, such as wide temperature measurement scope, high precision, long read distance and small dimension and convenient installation, especially applicable for temperature measurement applications under all kinds of metal environment and conveniently applicable for power, energy and special process production line, etc.

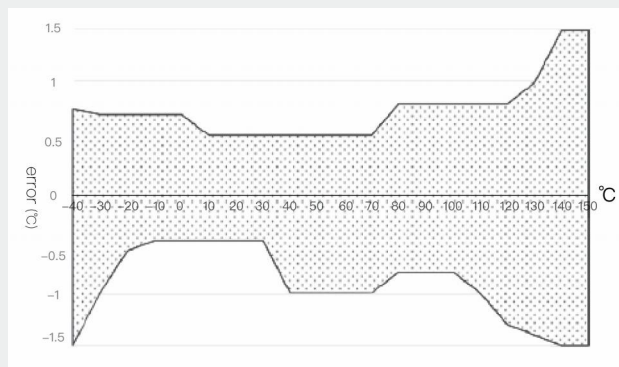


## Temperature measurement scope

Communication distance/max communication distance



Normalization sensor read distance and temperature relationship curve



Temperature error curve in range

## Key parameters

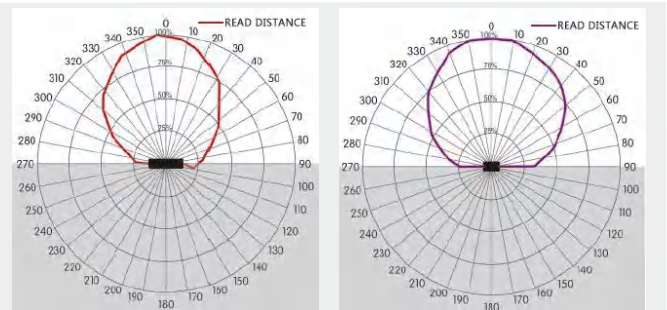
### Core performance

Protocol	EPC Global C1G2 v1.2
Frequency	902MHz~928MHz
Communication distance ( EIRP=4W )	6.0m
Chip series	LTU3 series
TID memory	128 bits
EPC memory	96 bits
User memory	160 bits (user editable part-128bits, sensor parameter-32bits)
Frequency offset	<2MHz
With endurance	100, 000 cycles

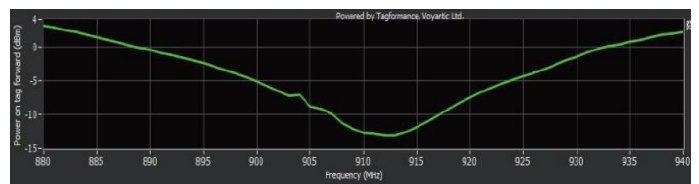
### Use environment ( Application background )

Working temperature	-40°C~+150°C
Endurance temperature	-40°C~+225°C
IP protection grade	IP67
Fall	1 m 200 times (plastic ground)
Application background	Metal surface optimization
Data retention	>25 years

## Radiation Chart



## Sensitivity curve



## Installation methods and examples

**Installation method:** Pasted on metal surface.



## Key features

- Battery free, safe and reliable;
- Independent IDs, data never interface with each other;
- Compact size and flexible deployment;
- UHF RFID technology is used, which is not affected by the electrical parameters and power load of primary equipment;
- Long temperature measurement range:  $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$ ;
- Ultra high temperature resistant design ensures no damage at  $-40^{\circ}\text{C} \sim +225^{\circ}\text{C}$ ;
- Contact with the actual hot spot, achieve higher accuracy to  $\pm 1^{\circ}\text{C}$ ;
- Radiation immunity level  $\geq 10\text{V/m}$ .

## Application

- Power grid online temperature real-time monitoring, including high-voltage transformation and medium and low voltage distribution facilities key points online temperature real-time monitoring;
- Vulcanization process temperature monitoring, including tire vulcanization process single product temperature real-time monitoring and single product track;
- High load IT equipments status monitoring, including IDC machine room server heating condition implementation track.

## Appearance characters

Color Silver

Size (mm) 25\*9\*5

