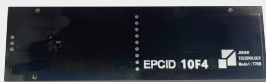


## Product model

TSP872503-32

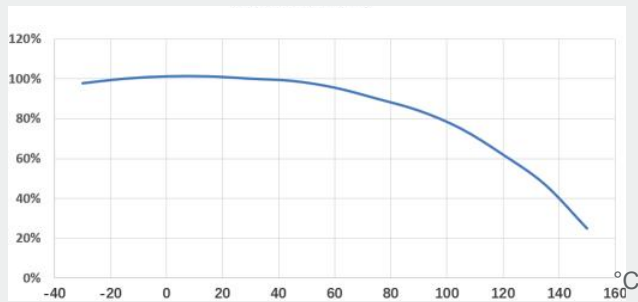
## Product introduction

The TSP872503-32 type PCB base material anti-metal temperature measurement sensor designed and produced by JOHAR TECHNOLOGY is a temperature measurement 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 and non-metal environment.

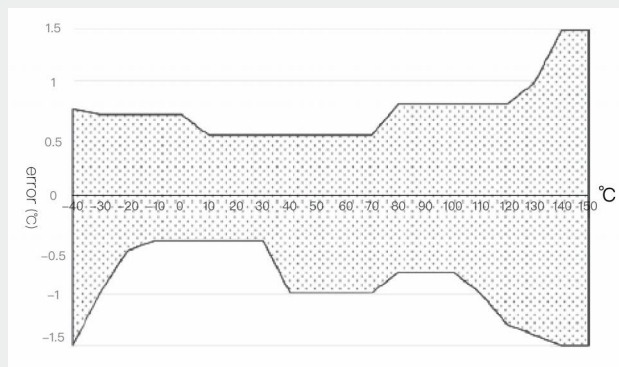


## Temperature measurement scope

Communication distance/max communication distance



Normalization sensor read distance and temperature relationship curve



Temperature error curve in range

## Key parameters

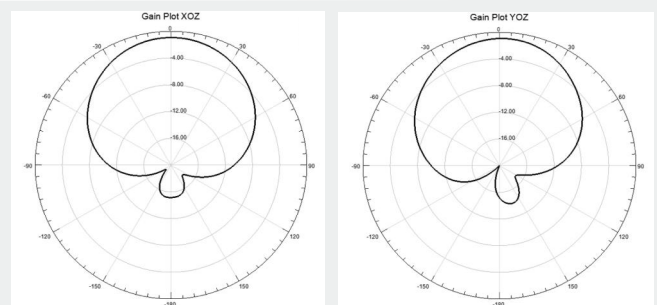
### Core performance

Protocol	EPC Global C1G2 v1.2
Frequency	902MHz~928MHz
Communication distance ( EIRP=4W )	7.0m
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

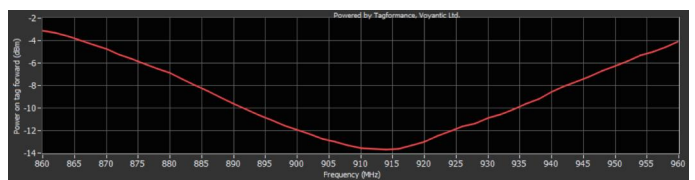
### Use environment ( Application background )

Working temperature	-40°C~+150°C
Endurance temperature	-40°C~+225°C
IP protection grade	IP55
Fall	1 m 200 times (plastic ground)
Application background	Metal surface optimization
Data retention	>25 years

## Radiation Chart

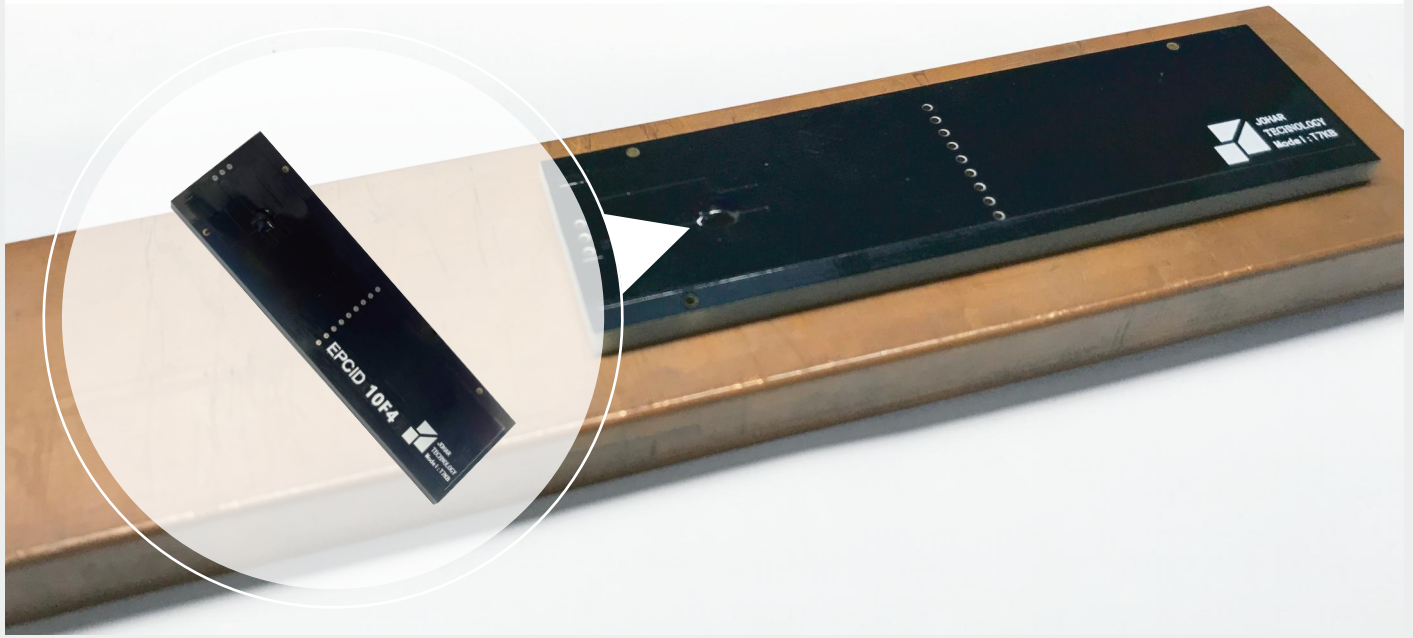


## Sensitivity curve



## Installation methods and examples

**Installation method:** Pasted on surface of various metal and non-metal materials.



## Key features

- Battery free, safe and reliable;
- Independent IDs,data never interface with each other;
- Contact with real hot spots to ensure higher temperature measurement accuracy;
- Work in UHF band, not affected by common power frequency signals;
- Long temperature measurement range:  $-40^{\circ}\text{C}\sim+150^{\circ}\text{C}$ ;
- Contact with the actual hot spot, achieve higher accuracy to  $\pm 1^{\circ}\text{C}$ ;
- Wide frequency band and good scene adaptability;
- 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;
- Other temperature control process included production line single product track and quality management.

## Appearance characters

Color	Black
Size (mm)	86.6*25*3

