

## Product model

TSX1602005-32

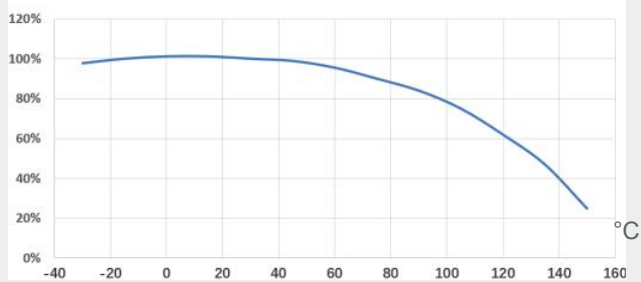
## Product introduction

The TSX1602005-32 Separation-type temperature measurement sensor designed and produced by JOHAR TECHNOLOGY meets the demands of materials for temperature measurement, including liquid, metal, etc. which has characters, such as flexible temperature measurement point location, wide temperature measurement scope, high precision, long read distance and small dimension and convenient installation, especially applicable for temperature measurement applications under all metal, liquid or special material environments and conveniently applicable for power, energy, livestock raising and special process production line, etc.

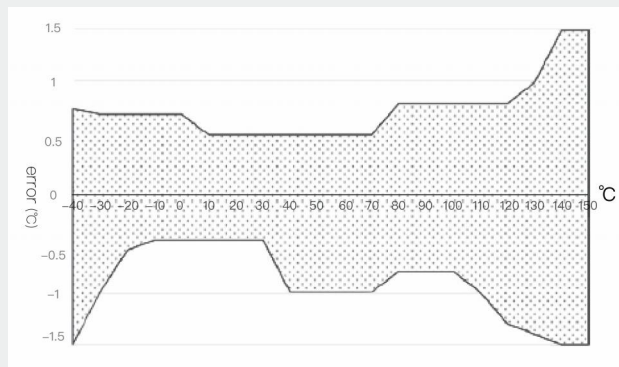


## Temperature measurement scope

Communication distance/max communication distance



Normalization sensor read distance and temperature relationship curve



Temperature error curve in range

## Key parameters

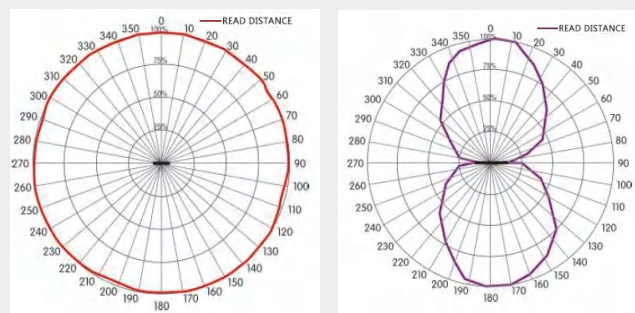
### Core performance

Protocol	EPC Global C1G2 v1.2
Frequency	902MHz~928MHz
Communication distance ( EIRP=4W )	2.5m
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

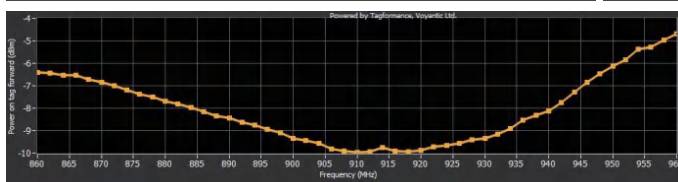
### Use environment ( Application background )

Working temperature	-40°C~+150°C
Endurance temperature	-40°C~+150°C
IP protection grade	IP65
Fall	1 m 200 times (plastic ground)
Application background	Inside Background materials include liquid
Data retention	>25 years

## Radiation Chart

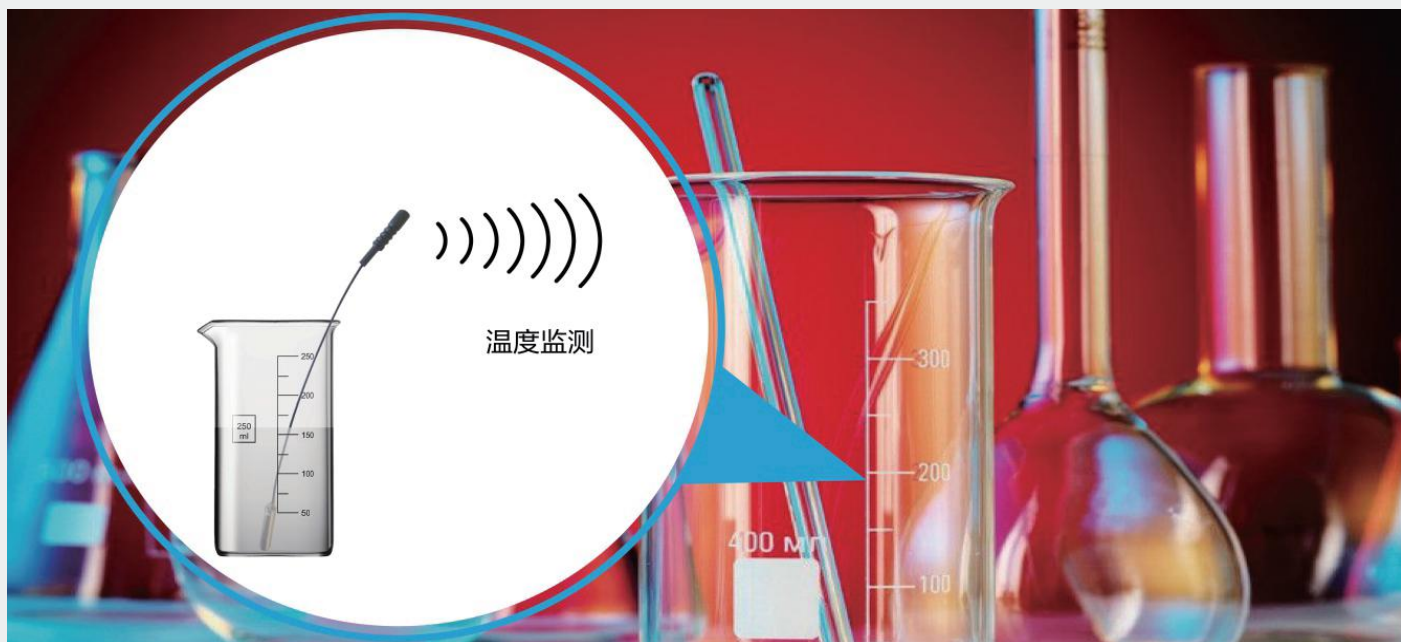


## Sensitivity curve



## Installation methods and examples

**Installation method:** Palce the metal head in liquid or ther enclosed space where the hot spot is,and put the other side(antenna)within the communication range of the reader.



## Key features

- Battery free, safe and reliable;
- Independent IDs,data never interface with each other;
- Small size, ensuring that it can go deep into the heating point to obtain accurate temperature;
- Long temperature measurement range:  $-40^{\circ}\text{C}\sim+150^{\circ}\text{C}$ ;
- Contact with the actual hot spot, achieve higher accuracy to  $\pm 1^{\circ}\text{C}$ ;
- Radiation immunity level:  $\geq 10\text{V/m}$ .

## Application

- Cold chain transportation box internal temperature real-time monitoring;
- Liquid internal temperature monitoring;
- Metal structure internal temperature monitoring;
- Other temperature control process included production line single product track and quality management.

## Appearance characters

Color	Black
Size (mm)	Probe: 20*Φ5, Total 160

