

Product model

TSC100503X-L32X2

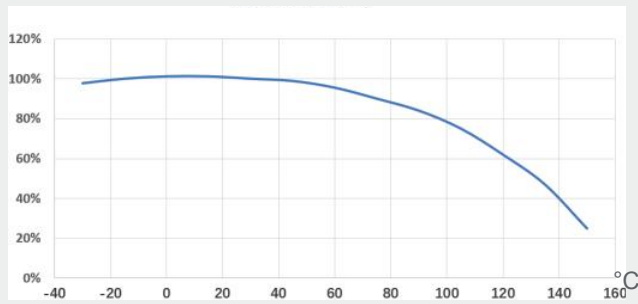
Product introduction

TSC100503X-L32X2 is a nut shaped sensor, this sensor can be directly installed in the ring main unit, power distribution cabinet and other positions to realize on-line real-time temperature monitoring.

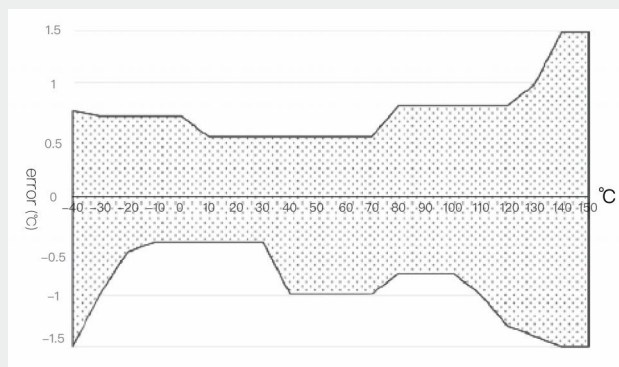


Temperature measurement scope

Communication distance/max communication distance



Normalization sensor read distance and temperature relationship curve



Temperature error curve in range

Key parameters

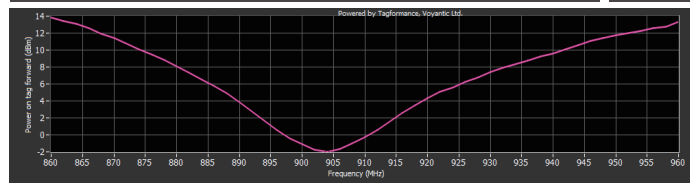
Core performance

Protocol	EPC Global C1G2 v1.2
Frequency	902MHz~928MHz
Communication distance (EIRP=4W)	1.5m
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~+225°C
IP protection grade	IP55
Fall	1 m 200 times (plastic ground)
Application background	Ring main unit plug
Data retention	>25 years

Sensitivity curve



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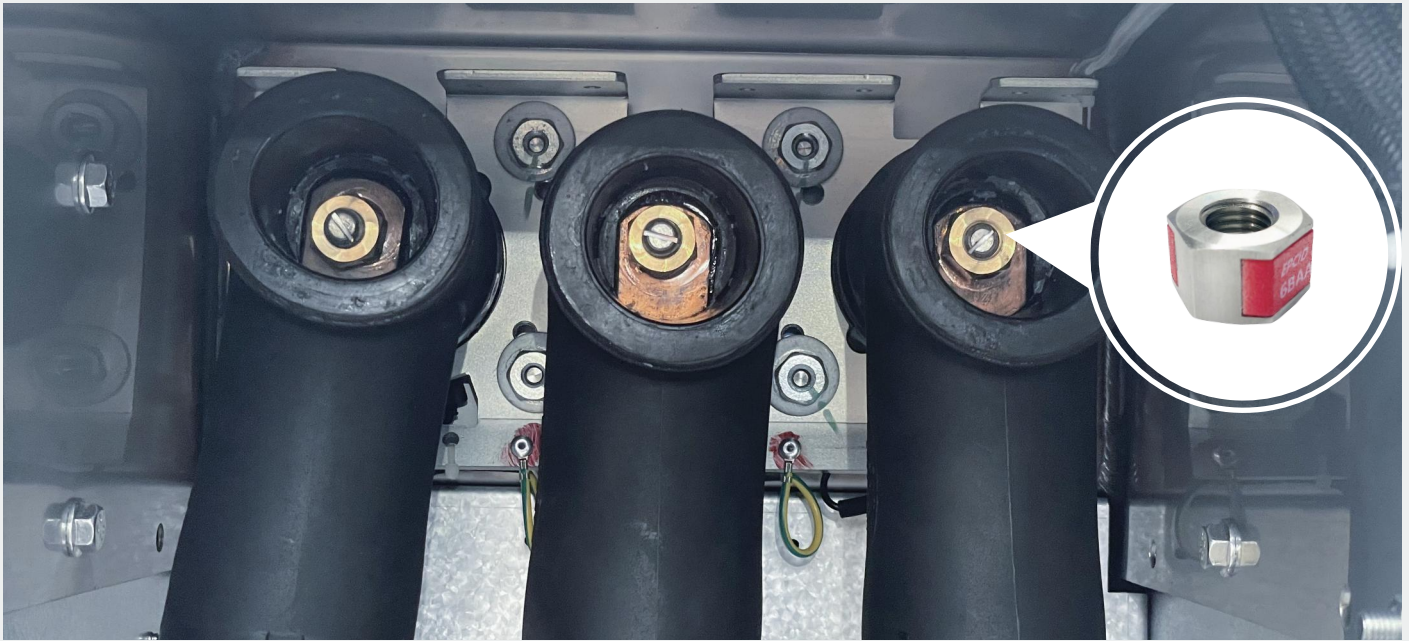
official account

Tel:0571-88560873

www.johar.cn

Installation methods and examples

Installation method: Replace ordinary nut.



Key features

- Battery free, safe and reliable;
- Independent IDs, data never interface with each other;
- Small size, Match the temperature measurement requirements of the plug of the ring network unit;
- 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 $\pm 1^{\circ}\text{C}$.
- Combined with plug:

Insulation resistance $\geq 2000\text{M}\Omega$

Power frequency withstand voltage: 39kV/5min,
42kV/1min

Partial discharge level: $24\text{kV} \leq 10\text{pC}$

Lightning protection grade: 170kV/50ms

Radiation immunity level: $\geq 10\text{V/m}$

Application

- On line real-time temperature monitoring of ring main unit and distribution cabinet.

Appearance characters

Color	Black
Size (mm)	24*21*13 / 24*21*14.5 / 26.5*24*17

