

Product model

TSC303005-B32

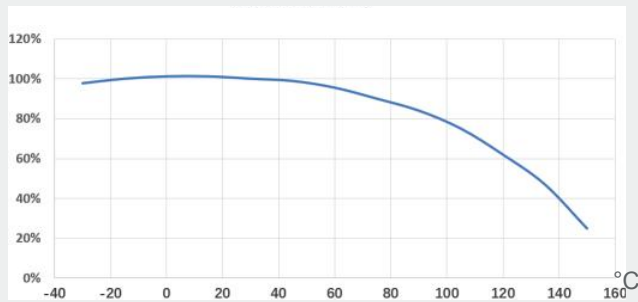
Product introduction

TSC303005-B32 is a temperature sensor specially designed for power copper medal and the other complex environments, which has characters, such as wide temperature measurement scope, high precision, long communication distance and small dimension and convenient installation, especially applicable for temperature measurement applications under all kinds of metal environments, it is applicable to the, energy and special process production line, etc.

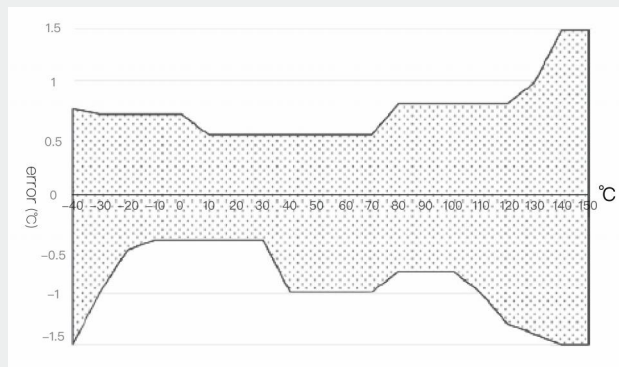


Temperature measurement scope

Communication distance/max communication distance



Normalization sensor read distance and temperature relationship curve



Temperature error curve in range

Key parameters

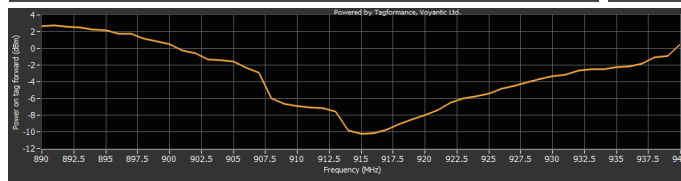
Core performance

Protocol	EPC Global C1G2 v1.2
Frequency	902MHz~928MHz
Communication distance (EIRP=4W)	8.0m
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	Power busbar
Data retention	>25 years

Sensitivity curve



浙江悦和科技有限公司
ZHEJIANG JOHAR TECHNOLOGY CO.,LTD

©2022 Johar Co., Ltd. All rights reserved.V2.0.202210

506, Bldg. 12, AI Town, Yuhang Street, Yuhang Dist., Hangzhou

official account

Tel:0571-88560873

www.johar.cn

Installation methods and examples

Installation method: Bind and fix on the busbar.

Reference for cable tie selection: Teflon, (L) 370mm * (W) 4.6mm



Key features

- Battery free, safe and reliable;
- Independent IDs, data never interface with each other;
- 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 busbar:

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 temperature real-time monitoring of power switchgear busbar.

Appearance characters

Color	Black
Size (mm)	66*34*10

