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

Ceramic anti-metal temperature sensor —TSC130904C-32

www.johar.cn
Tel:0571-88560873

Product model

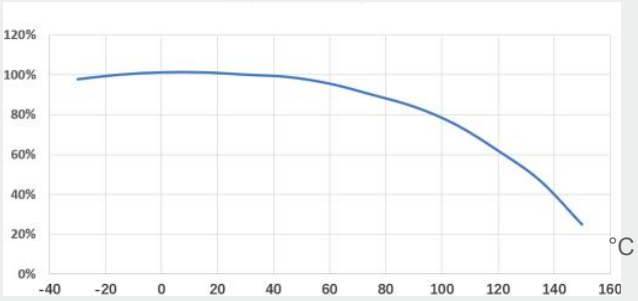
TSC130904C-32

Product introduction

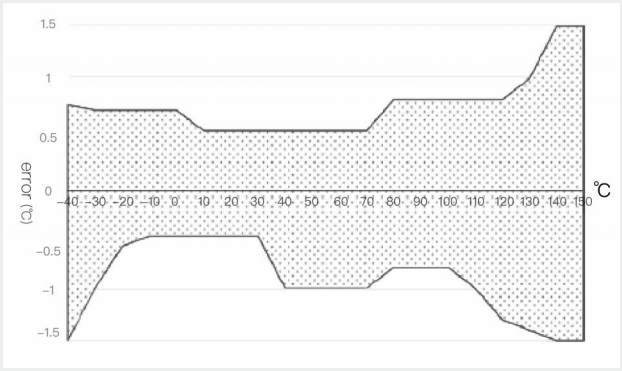
TSC130904C-32 sensor designed and produced by Johar Technology is specially used for pouring plugs of power ring main unit. It has the characteristics of small size, wide temperature measuring range, high precision and long reading distance. The unique pentagonal arc design (patent) can better meet the requirements of the power industry for anti-static, withstand voltage and partial discharge protection. It is also suitable for other temperature measurement applications in various metal environments.

Temperature measurement scope

Communication distance/max communication distance



Normalization sensor read distance and temperature relationship curve



Temperature error curve in range

Key parameters

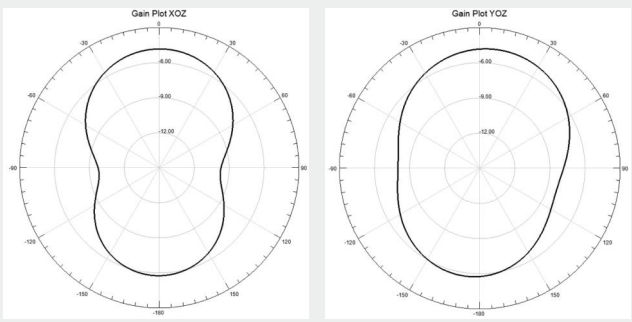
Core performance

Protocol	EPC Global C1G2 v1.2
Frequency	902MHz~928MHz
Communication distance （EIRP=4W）	3.0m
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

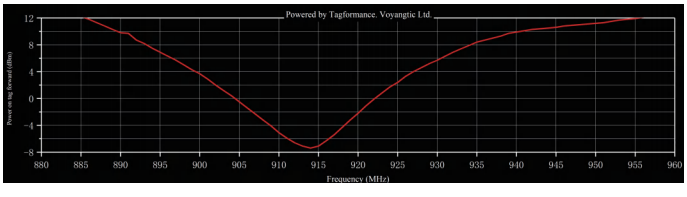
Use environment（Application background）

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	Ring main unit plug
Data retention	>25 years

Radiation Chart



Sensitivity curve



official account

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

506, Bldg. 12, AI Town, Yuhang Street, Yuhang Dist., Hangzhou
Tel:0571-88560873 www.johar.cn

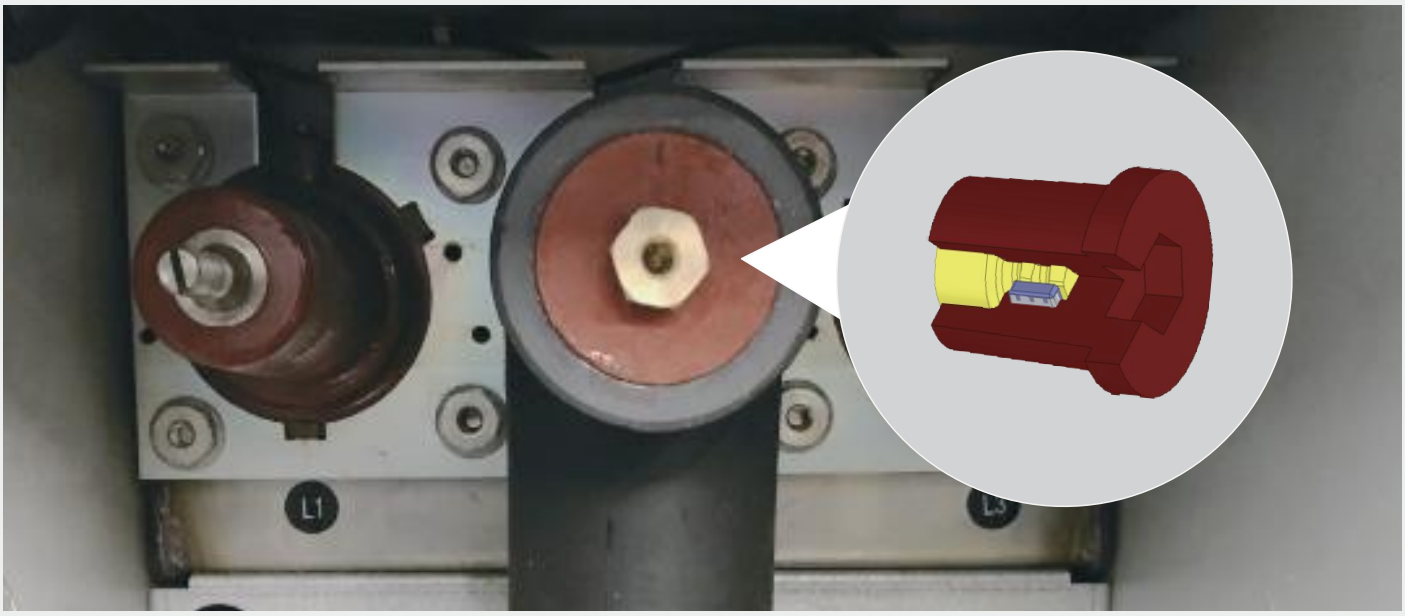
浙江悦和科技有限公司
ZHEJIANG JOHAR TECHNOLOGY CO.,LTD

Ceramic anti-metal temperature sensor —TSC130904C-32

www.johar.cn
Tel:0571-88560873

Installation methods and examples

Installation method: Close to the metal connector inside the plug of the ring main unit and pour it inside the epoxy resin; It can also be pasted on the surface of other temperature measuring points, especially on the metal surfacesuch as plug nut.



Key features

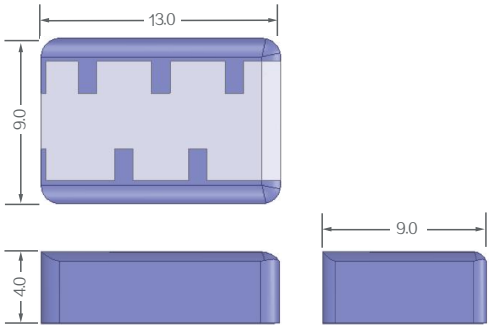
- Battery free, safe and reliable;
- Independent IDs, data never interface with each other;
- Small size, Implantable in cable plug;
- UHF RFID technology is used, which is not affected by the electrical parameters and power load of primary equipment;
- Long temperature measurement range：-40℃~+150℃;
- Ultra high temperature resistant design ensures no damage at - 40℃~+225℃;
- Contact with the actual hot spot, achieve higher accuracy to ±1℃;
- Combined with plug：
  Insulation resistance≥2000MΩ
  Power frequency withstand voltage：39kV/ 5min、42kV/1min
  Partial discharge level: 24kV≤10pC
  Lightning protection grade：170kV/50ms
  Radiation immunity level：≥10V/m

Application

- Power grid online temperature real-time monitoring, including high-voltage transformation and medium and low voltage distribution facilities Pre-pouring temperature measurement of key nodes;
- Other temperature control process included production line single product track and quality management.

Appearance characters

Color	Silver
Size (mm)	13*9*4



official account

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

506, Bldg. 12, AI Town, Yuhang Street, Yuhang Dist., Hangzhou
Tel:0571-88560873 www.johar.cn