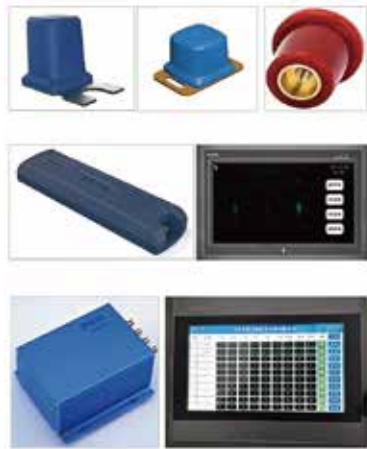




Temperature Detector



CBRN



Temperature Detector

This series is a passive wireless temperature measurement system based on SAW technology, comprising temperature sensors, readers and antennas, powered by passive RF. It enables contact-based temperature measurement with a wide range, high precision and high sampling frequency for real-time temperature tracking. Lightweight and versatile, it offers flexible deployment and integration into existing industrial automation systems. The passive wireless design ensures ultra-high safety, long service life and maintenance-free



Features

- Temperature range: -25℃~125℃, expandable on demand (≤250℃)
- Measurement accuracy: ±2℃
- Sampling frequency: 1~10s
- Passive, wireless RF, high safety
- Device lifespan >10 years
- Sensor lifespan >20 years
- Maintenance-free
- RS485 interface
- Reserved TL/EX interfaces
- Integratable with local networking
- Integratable with remote monitoring
- Integratable with cloud platform monitoring
- Optional tuning fork type (height 40mm)
- Optional binding type (height 22mm)

Applications

- High and low voltage switchgear
- Main transformers
- Outdoor ring main units
- Dry-type transformers
- Distribution transformers
- High-voltage intermediate cable joints
- Hydropower unit rotor poles
- Thermal power unit rotor poles
- Iron and steel industry equipment
- Cement industry equipment
- Chemical pipelines
- Train axles
- Internal combustion engine bearings

Specifications

MODEL	RD50
Temperature Range	-25℃ to 125℃ (expandable to ≤250℃)
Accuracy	±2℃
Dimensions	Tuning fork: 40mm height; Strap-on: 22mm height
Operating Temperature	-25℃ to 70℃
Communication Interfaces	Downlink (to sensor): Low-power wireless; Uplink (to terminal): RS485, reserved TL/EX interface
Sampling Frequency	1-10 seconds
Power Supply	AC/DC 100-240V
Power	<4W
Dimensions	115mm × 84mm × 50mm
Wireless Transmission Range	≤2.5m (adjustable based on reader power)
Wireless Frequency Range	426-449MHz or 451-474MHz
Dimensions	Flat panel: 248mm × 64mm × 26mm
Operating Temperature	-40℃ to 70℃
Sampling Frequency	438M or 463M
Mounting	Magnetic base for fixation