

**HF-C-203**

# Cable Temperature Online Monitoring



This Cable Temperature Online Monitoring system provides 24/7 real-time temperature detection for cable joints, cable trenches and power equipment. With high-precision wireless sensors and automatic over-temperature early warning, it effectively prevents cable overheating, insulation aging and fire risks for smart power grid operation.

## Key features

- Wireless temperature acquisition terminals: Quantity matched with measuring points stipulated in contract, with waterproof mounting accessories
- Communication management concentrator ×1, equipped with power adapter and mounting bracket
- High-precision contact temperature sensors: Quantity consistent with acquisition terminals, with high-temperature resistant fixing cable ties
- Installation CD for intelligent monitoring background software: including operation manual & activation authorization code
- Supporting communication antennas: 1 piece each for concentrator and acquisition terminal

## Technical specifications

| Parameter                         | Value                                                                                                                 |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Temperature Measuring Range       | -55°C ~ +125°C; customized expansion to -55°C ~ +200°C available for special applications                             |
| Full-range Temperature Accuracy   | ±0.5°C; temperature resolution: ±0.1°C                                                                                |
| Maximum Capacity per Concentrator | 256 acquisition terminals; 4 temperature channels per terminal                                                        |
| Wireless Transmission Modes       | Zigbee self-organizing network, GPRS/4G long-distance transmission; LoRa version supports 10km transmission distance  |
| Sensor Ingress Protection         | IP66, resin sealed for waterproof, dustproof & moisture-proof; withstands ESD ±10000V high voltage surge              |
| Communication Interface           | Standard RS485 port; compatible with Modbus RTU, IEC 61850 protocols for seamless docking with existing SCADA systems |
| Terminal Battery Lifespan         | >=5 years under normal operating conditions                                                                           |
| Alarm Response Time               | Data transmission delay <2s under abnormal status; multi-level customizable alarm thresholds                          |
| Operating Environment             | -25°C ~ +80°C, relative humidity <=95% (non-condensing), stable long-term operation                                   |

## Compliance and documents

|                         |                                                    |
|-------------------------|----------------------------------------------------|
| Applicable standards    | [ TO BE CONFIRMED ] standard applied to this model |
| Calibration certificate | [ TO BE CONFIRMED ]                                |
| Optional accessories    | [ TO BE CONFIRMED ]                                |

## Warranty and support

12-month warranty on every exported instrument. English operation manual and remote video guidance at commissioning. T/T, L/C at sight and deposit terms for bulk orders; sea, air or rail shipping.