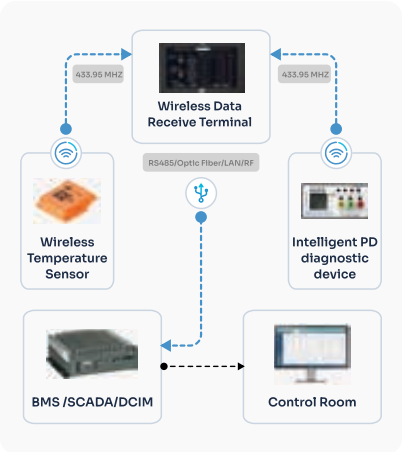
# PTSPW2000F HMI Receiving Module

## Product Overview

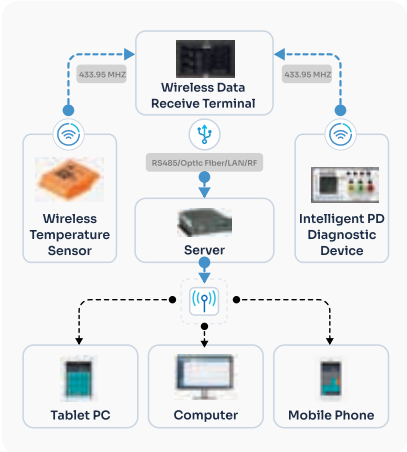
The PTSenR™ HMI Receiving Module (PTSPW2000F) is designed for continuous thermal monitoring of electrical power equipment connection points, addressing issues such as material ageing, poor contact, current overload, and excessive temperature rise.

The PTSPW2000F features an ultra-low power Zigbee Green Protocol design, RF wireless isolation, and photoelectric isolation technology, ensuring complete isolation, strong anti-jamming ability, reliable operation, and easy installation. This makes it a very good solution for the data monitoring challenges in high-voltage environments. The PTSPW2000F HMI provides complete integral monitoring solutions for various high and low voltage switch cabinet contacts, gate switches, high-voltage cable middle heads, dry transformers, low-voltage high-current cabinets, and other electrical equipment. It is suitable for both new builds and retrofits. The pre-configured screens offer an easy-to-use graphical interface to indicate the status of all sensors.

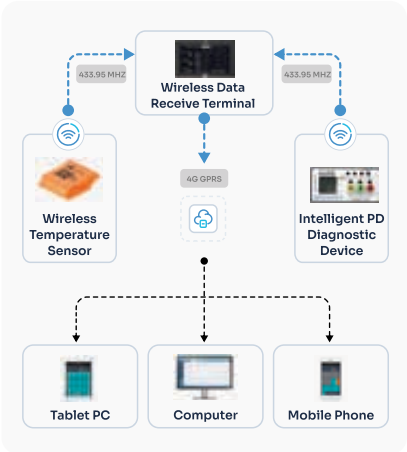
## System Architecture




Local BMS/SCADA/DCIM




Standalone Server with remote monitoring




CLOUD storage with remote monitoring

## Applications

Industrial Facilities

Commercial Buildings

Data Centers

Electrical Infrastructure

## Unique Features

- User Friendly
- Low Maintenance
- Colour Indicators
- Graph Trending (up to 90days)
- Display Absolute Target Temperature
- Unbalanced Temperature
- 10,000 Events Log
- Buzzer
- Pre-alarm, & Alarm Dry Contact
- Export via USB
- Date and Time Stamp
- Easy Maintenance

## Characteristics

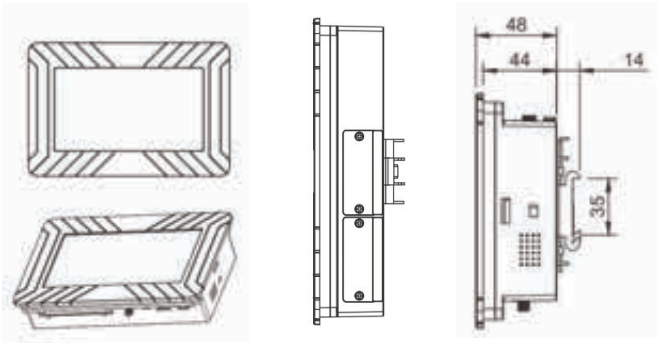
The PTSPW2000F stands out by offering robust isolation through its RF wireless isolation and photoelectric isolation technology, addressing the common vulnerability to electromagnetic interference (EMI) found in traditional electrical monitoring systems. In contrast to many monitoring technologies that respond to temperature alarms after overheating has occurred, which may be too late and result in catastrophic damage or failure, the PTSPW2000F employs a proactive approach. Its continuous thermal monitoring capabilities detect subtle temperature rises well before they reach critical levels, allowing for timely maintenance and preventing costly breakdowns.

## Related Products

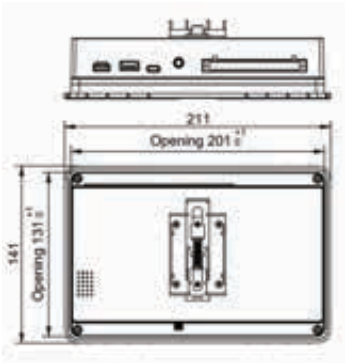
In addition to the PTSPW2000F Touch Screen Receiving Module with RS-485, our product line includes:

- **PTSPW2000F-E:** 7" HMI with touch screen RECEIVING MODULE with RS-485 and Ethernet. This Provides high-speed network connection to achieve real-time data transmission.
- **PTSPW2000F-G:** 7" HMI with touch screen RECEIVING MODULE with RS-485 and GPRS. This enables wireless communication capabilities for remote monitoring and control.

## Dimensions




Unit: mm




## Specifications

| | |
|---|---|
| Power Supply Input Voltage | AC85 ~ 264V DC110V / 220V |
| Maximum Power Consumption | ≤5W |
| Wireless Operating Bandwidth | 433.92MHz (Zigbee) |
| Wireless Reception Sensitivity | -110dBm |
| Wireless Receiving Distance | 0.4 ~ 300meter |
| Communication Output | RS485, Ethernet, GPRS |
| Alarm of Outputs | Built-in buzzer, relay output, temperature value font colour changes |
| Output Relay | 1 Passive Relay (Dry Contact) |
| Communication Rate | 2400 ~ 115200 bps (Default 9600bps) |
| Communication Protocol | Standard Modbus-RTU protocol |
| Max. Numbers of Sensors | 500 Temp, 100 PD, 100 T/H |
| **Miscellaneous** | |
| Battery Back-up | Via Super-Cap and RTC and system data |
| Dimensions Size | 7-inch: 210 x 140 x 49 (mm)<br>10-inch: 267 x 170 x 56 mm) |
| Mounting Cut-out | 7-inch: 201 x 131 x 45 (mm)<br>10-inch: 201 x 131 x 45 (mm) |
| Weight | 7-inch: 0.62 (kgs) /<br>10-inch: 0.9 (kgs) |
| Operation Temperature | -20ºC ~ 70ºC |
| Relative Humidity (RH) | ≤95%RH (non-condensing) |
| Storage Temperature | -20ºC ~ 85ºC |
| Certification | EN 61000-4-8:2001;<br>EN 61000-4-9:2001;<br>EN 61000-6-2:2005+AC;<br>EN 61000-6-4:2007+A1:2011;<br>EN 61000-4-2:2008;<br>EN 61000-4-3:2010<br>EN 60255-26:2013;<br>EN 62368-1:2014+A11:2017;<br>EN 61000-4-12; |
| **Graphic Display Screen** | ... |
| Graphic Display Screen LCD Type | WQVGA Colour TFT, LCD display |
| Viewing Area | 7-inch / 10-inch |
| Illumination Backlight | White LED, software-controlled |
| Colours | 65,536 (16bits) |
| Touchscreen | Resistive, analog |
| Virtual Keypad | Display virtual keyboard when the application requires data entry |