

# Energom-W3000 SWITCHGEAR THERMAL MONITOR

## SWITCHGEAR PROTECTION RELAY



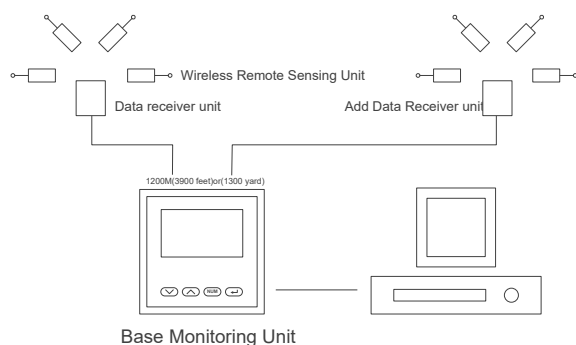
### Introduction

Energom-W3000 switchgear thermal monitor designed can enhance safety by enabling operators and maintenance engineers to proactively manage temperature variations in switchgear components, minimizing the risk of sudden temperature increases.

Energom-W3000 provides continuous 24/7 monitoring for critical busbar joints with support for up to 32 monitoring nodes per switchgear. featuring panel mount HMI units with acousto-optic alarms and DO ports, users can integrate it into automatic alarm/control systems. Additionally, the equipped RS485 port allows seamless connection to existing SCADA systems for remote sensing control.



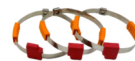
### Working Principle



### Main Features

- Alarm output (indication through a lighting led).
- Pre-defined high or low temperature conditions.
- Low-size (144 x 144 mm), panel-mounting base unit.
- RS-485 or Ethernet communication to PC (optional).
- Instantaneous, maximum and minimum values of each measured parameter.
- Real-time data 24\*7 / 365 Days monitor LV switchgear incomers and feeder, line, and load side.
- Two-level alarm parameter setting. provide 2\*DO NC & NO contact for external alarm trig.
- Battery-free design, permanently installed sensors and zero maintenance.

### Related Accessories



#### SCM-SAW-S Remote wireless node

- 0-65°C, accuracy 0.5°C
- Maintenance free during life cycle
- Suitable for flat surfaces or VCB contacts



#### SCM-SAW-W Remote wireless node

- Surface acoustic wave (SAW)
- Maintenance free during life cycle
- External wiring probe for irregular surface



#### SCM-BAT-S Remote wireless node

- Battery powered, 2000mAh for 2~4 years
- Green/Yellow/Red for three phase
- Suitable for flat surfaces or VCB contacts (test under 2min data transmit interval)

## Technical Characteristics

| Electrical characteristics           |   |
|--------------------------------------|---|
| Power supply                         | AC / DC 80-270V, 45-65Hz ,DC 20-60V (optional)  |
| Maximum power consumption            | 6W  |
| Wireless remote sensing unit         | Standard type 3-12  |
| Temperature monitor range            | From 0°C ~ 99 °C  |
| Wireless communication frequency     | 433Mhz / 460Mhz / 869Mhz  |
| Transmit power                       | Less than 20mw  |
| Distance of the receiver and monitor | Up to 80m (260 foote)   |
| Others                               |   |
| Battery life                         | 3-5 years (every fifteen minutes to send a data)  |
| Working environment                  | Temperature: -20°C~+125°C<br>Humidity: RH 20%~95% (No condensation)   |
| Storage conditions                   | Temperature: -25°C~+60°C<br>Humidity: RH 20%~95%  |
| Protection                           | Panel: IP40   |
| Dimensions                           | Base monitoring unit: 144mm×144mm×110mm<br>Data receiver unit: 65mm×50mm×30mm<br>Wireless remote sensing unit: 65mm×50mm×25mm |