Safer Assets. Easier Maintenance.

24*7 Condition Based Thermal Monitoring Solution

一多传感
YADO SENSOR
TECHNOLOGY

Why Change from Inspection to Monitoring

	Periodic Inspections	Continuous Monitoring
Issue Detection	**Delayed**, fixed intervals	**Early**, real-time alerts
Labor Cost	**High labor cost** and repetitive	**Reduced**, more efficient
Coverage	Misses risky/**inaccessible** spots	Inaccessible points **covered**
Reliability	**Experience**-dependent	**Data-driven**, consistent
Insights	**Limited** and reactive	AI-powered, **predictive**

Detect Potential Failure Earlier
90%+

Improve Inspection Efficiency
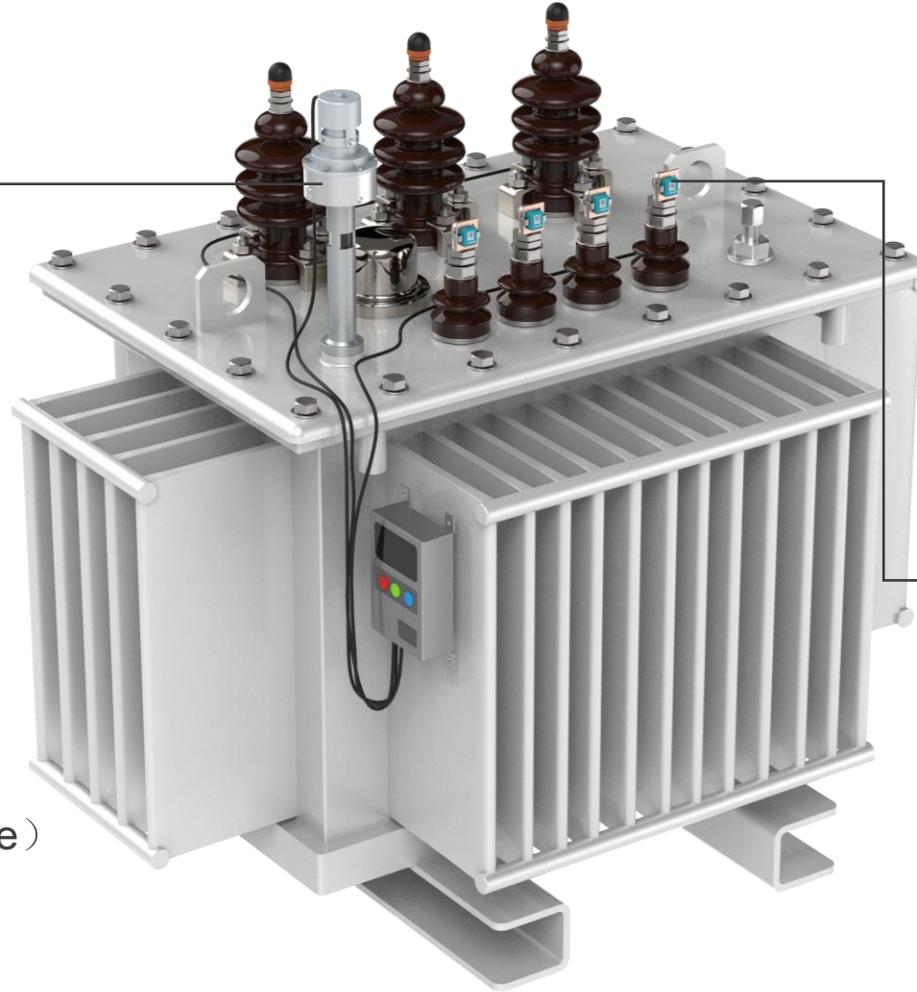**75%+**

Reduce Labor Cost
50%+

Extend Maintenance Interval
30%+

Oil-type Transformer Monitoring

Transformer Oil LTP Monitor

（Oil level, temperature and pressure）

Micro Thermal Tag

(Wireless self-powered thermal sensor)

Dry-type Transformer Thermal Monitoring

LV Busbar Joints

HV Coil Ends

Coil Tap Change

Wireless Batteryless Thermal Sensor

Micro Thermal Tag

Scope of application	≤220KV	Power Source	Induction
Measuring Range	-40~150℃	Start-up Current	3.5A
Accuracy	±1℃(-40 - 80℃) ±2℃ (Other)	Wireless Range	150m (LOS) 30m (Enclosed)

Dynamic Thermal Monitoring

- Measure every 5 sec and dynamically upload every 5 to 300 sec based on

Trouble-free

- Long range reliable wireless transmission
- Easy strap-on installation
- Batteryless (EMI Energy-harvesting)
- No calibration & maintenance needed

Robust & Reliable

- IP68 / IK07 / V-0 Rated, 130℃ environment tolerance

Ultra-long life

- Up to 20 years with ultra-low power technology

Compact Receiving Device
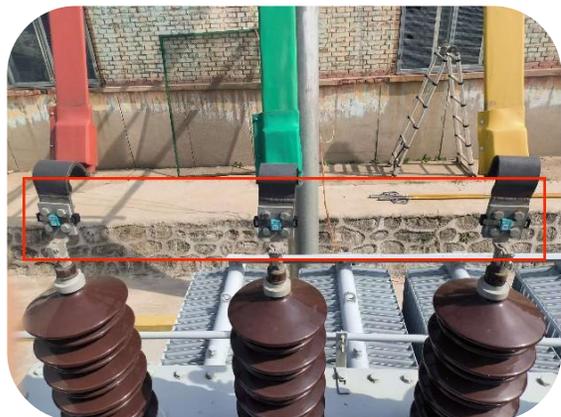

Wireless Concentrator

- Receive wireless message from sensors
- Single MCB sice DIN rail installation
- Mobile app configuration via bluetooth
- Transmit data to host via RS485 Modbus RTU

Concentrator

Number of sensors	36-96 (with different antenna)	Power Supply	85-265V AC 18-240V DC
Wireless Coverage Range	150m(open space) 30m(1 layer metal enclosed)	Southbound Protocol	2.4GHz LoRa
Upload Protocol	Modbus-RTU	Power	1W

Wireless Range

Sensor

150 meters
Outdoor open space

20 meters
Indoor 1 layer metal
enclosed

Receiver

SCADA

Standard Protocol
Modbus/IEC104/61850...

Receiver /Concentrator/ Gateway

2.4GHz LoRa

Wireless Self-powered Sensor