



POWER TEMPHU SOLUTION

End-to-End Environmental and Cable
Monitoring for Smarter Infrastructure

ABOUT THE COMPANY:

Nano sensorics Company is based in Lithuania (European Union) and founded by the scientists of Lithuanian Kaunas University of Technology. Company specialize in production of innovative products based on "pattern recognition", IoT, gas analysis, and in the public, industrial, infrastructure, defense sectors.

POWERTEMPHU MONITORING SOLUTION

The **Power TempHu Solution** is a full-stack system that continuously monitors temperature and cable conductivity to protect your infrastructure, reduce energy waste, and ensure environmental stability. Powered by LoRaWAN® connectivity, it delivers secure, wireless data from edge devices to a central dashboard — no manual checks, no cabling, no surprises.



KEY BUSINESS ADVANTAGES OF THE SOLUTION:

Protect Critical Infrastructure and Avoid Failures

- Identify overheating or degradation in power cables and busbars
- Prevent humidity-related faults in sensitive spaces
- Reduce downtime due to thermal or electrical stress
- Prevent overload of your power cables and damage to your assets

Enable Predictive Maintenance and Safety Compliance

- Detect anomalies before they become failures
- Replace routine checks with real-time alerts
- Generate historical logs for audits, insurance or compliance

Reduce Operational and Installation Costs

- 10+ years of battery-powered performance
- Plug and play setup minimizes labor and downtime

Monitor Remotely with Scalable LoRaWAN® Architecture

- Deploy across multiple buildings with no network rewiring
- Monitor environmental and cable conditions centrally
- Scale with low-power IoT gateways — ideal for wide sites

Business Impact You Can Measure

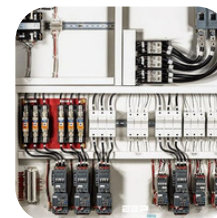
- Safer infrastructure and fewer emergencies
- Protection from damage from power line overloading
- Preventive and predictive maintenance of your power infrastructure
- Real-time visibility across your facility
- Scalable monitoring — no extra IT infrastructure required

Ideal For

- Power grids, substations and cable/busbar systems
- Industrial and commercial facilities
- Server rooms, telecom racks and data centers
- Public buildings, hospitals and warehouses



Cable systems



Electrical cabinets



Busbars



Renewable energy sources



Warehouses and logistics centers



Commercial buildings



Hospitals



Manufacturing companies

SOLUTION STRUCTURE – How the Power TempHu Solution Works

Smart Monitoring from Sensor to Cloud:



The Power TempHu Solution integrates intelligent sensing, wireless transmission, and a secure data platform to give you actionable environmental and cable condition insights — in real time, from anywhere. Solution gives you security from huge damage caused to your industrial or production assets (lines, robots, lasers, etc.) from overloaded power lines and cables.

CLOUD PLATFORM (DATA VISUALIZATION AND CONTROL LAYER)

What it provides:

- Web-based dashboards, visualization and analytics
- Custom alert rules for temperature or conductivity thresholds and power line/busbar status
- Historical data logging and export for ESG, maintenance, or insurance
- Unlimited user accounts. Any number staff member can be informed about alerts and status

Key Benefits:

- View all infrastructure risks in one interface
- Automate alerts and HVAC responses
- Prove compliance, track trends, and reduce downtime

POWER TEMPHU SENSOR (DATA CAPTURE LAYER)

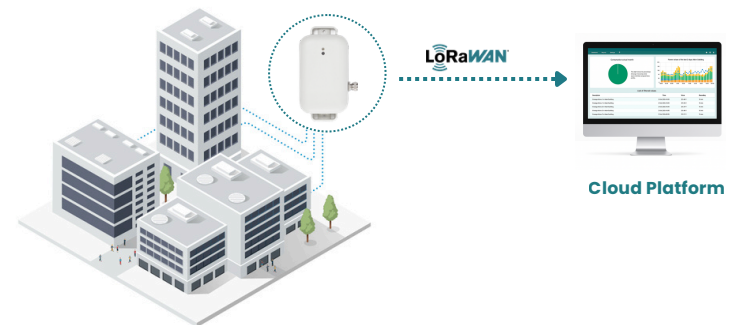
What it does:

- Conductivity and thermal health of power cables and busbars monitoring
- Pattern recognition and anomaly detection
- Auto-calibration
- Configurable via downlink
- Battery life up to 13 years
- No cabling or rewiring required
- Industrial-grade housing (ASA+PC-FR)

LORAWAN® GATEWAY (DATA TRANSMISSION LAYER)

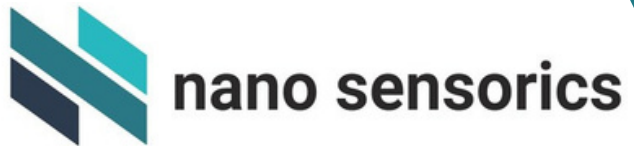
What it does:

- S-Securely transmits event data to the cloud using LoRaWAN®
- Ensures low-latency, long-range transmission with AES encryption
- Enables building-wide coverage with minimal gateways



NANO SENSORICS POWER TEMPHU SOLUTION ENABLES REAL CONTROL OVER POWER LINE AND BUSBAR HEALTHS MONITORING

Whether you're operating a factory, building, public facility, hotel or shopping mall, power line temperature, conductivity monitoring is a must. The Nano Sensorics solution gives you the tools to understand, monitor, protect assets, save energy and prevent losses — fast.



MONITOR SMARTER. ACT FASTER. SPEND LESS.
PROTECT YOUR POWER LINES, CABLES AND ASSETS.

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