POWER VIEW PWT

Energy harvesting , self powered

Temperature Monitoring system

Long range wireless energy harvesting

Switchgear temperature monitoring

system

PowerView
Testing & Monitoring Equipment

Pioneering the future of power testing and monitoring

www.powerview-energy.com

YouTube

Overview

The PWT Wireless Temperature Sensor is an advanced and reliable device designed for real-time temperature monitoring. Utilizing wireless communication technology, the sensor delivers precise temperature data to ensure the safety and efficiency of equipment and systems in various applications. This innovative solution is particularly well-suited for environments requiring non-contact temperature measurement, robust performance, and seamless integration with modern monitoring systems.

Key Features

Ultra-long wireless communication and low power consumption

Eliminates the need for complex wiring, reducing installation time and costs

Compact and Durable Design

Engineered to withstand harsh environments and extended operational periods

Easy Integration

Compatible with existing monitoring systems and wireless integration in Substation Digital

Real-Time Monitoring

Offers continuous temperature data updates for proactive decision-making

Energy-Efficient Operation

no power consumption

Alarm Functionality

Configurable alerts for high or low-temperature thresholds

High Precision

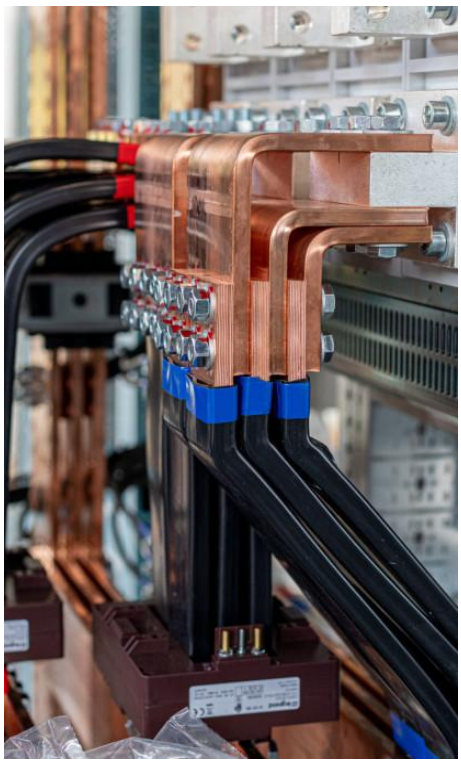
Provides accurate temperature readings with minimal error

Parameter	Specification
Measurement Range	-40°C to +120°C
Accuracy	±1°C
Power Supply	Self powered energy harvesting
Operating Temperature	-20°C to +85°C
Dimensions	55mm x 30mm x 20mm
Protection Level	As per application up to IP65

The PWT Wireless Temperature Sensor is versatile and can be used across various high-voltage and industrial applications. Below are some application examples

Bus bar Monitoring

In high-voltage substations, the PWT can monitor the surface temperature of bus bar, joints and other critical components. By identifying abnormal temperature trends, the sensor helps prevent overheating and potential equipment failures



Switchgear Temperature Monitoring

The sensor is ideal for monitoring the temperature of switchgear components, including circuit breakers and busbars, in high-voltage installations. Early detection of temperature anomalies enhances operational safety and reduces downtime

Benefits

Improved Reliability

Proactively addresses potential issues before they lead to equipment failure

Enhanced Safety

Reduces the risk of fire or damage due to overheating

Cost Savings

Minimizes maintenance and operational costs through efficient monitoring

Scalability

Can be deployed in large-scale systems with minimal additional infrastructure

Environmentally Friendly

Energy-efficient design supports sustainable practices

PowerView
Testing & Monitoring Equipment

Compliance and Certifications

The PWT meets the following standards:

- CE Certification
- RoHS Compliance

The PWT Wireless Temperature Sensor is designed for quick and simple installation. Its compact size and wireless capabilities make it suitable for both new and retrofit projects. Configuration can be completed using a user-friendly interface, accessible via a mobile app or desktop software (Substation Digital.)

Correlated thermal monitoring with other inspections and electrical tests in SUBSTATION DIGITAL – Asset management and risk assessment software

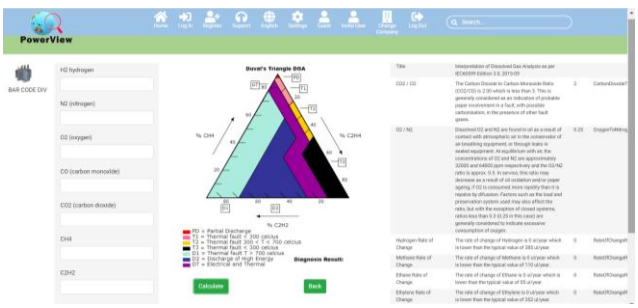
Comprehensive risk = $\int electrical\ test + visual + thermal + monitoring + corona$ inspection

Risk assessment and automated asset Diagnostics

Risk assessment and digitalization of all data includes analysis and manages all substation data such as electrical tests, monitoring, visual and thermal inspections for the most comprehensive asset assessment. It includes trending each individual parameter of the Electrical tests and analyzing the results of electrical tests performed on each element (comparing them with preset editable limits) depending on the element characteristics (like voltage level, type of insulation media etc.). It also includes managing of all other types of inspections and analyzes all the possible monitoring values (and compares to preset editable limits).

Predictive maintenance stands for knowing your high voltage assets condition while it is still in service. Smart substation maintenance is based on smart decisions. Smart decisions are based on individual elements condition holistic evaluation (monitoring electrical tests and other inspections such as thermal and corona). This kind of evaluation of your substation results in asset performance at its optimal maximum with minimum downtime. Comprehensive risk assessment means analyzing all important parameters in advance so actions can be taken at the optimal timing with minimal. repair and downtime costs .

The test reports and inspections data are processing and automatic results analysis is performed with recommendations using artificial intelligence for further tests (if needed) or course actions



PowerView
Testing & Monitoring Equipment

Build your digital substation

QR codes containing all the relevant data for all electrical elements

True Digital Electrical Substation with all existing substation element real electrical test, visual inspection, thermal and corona inspection and monitoring.

Substation Digital is integrated smart substation maintenance web application for digital HV asset management , risk assessment, inspections management , electrical tests management, processing and automated analysis according international standards and records keeping. A wireless maintenance Scada is also integrated in the app capable of connecting more than 1000 existing monitoring devices with alarms distribution . The app also features notification and access management for all elements. Everything can be arranged digitally as existing originally in HV substations. The features are also available as IOS and Android mobile app . The application functionalities are being divided as electrical tests, monitoring , visual, thermal and corona inspection on a cloud platform or on premises installation . This application allows power and big industrial companies to set up a virtual substation, assign authorizations within the company (staff can have different authorizations similar to the ones they have in maintenance such as: upload electrical tests, analyze tests, change limits, connect monitoring devices, analyze monitoring data, upload visual , thermal or corona status, comments and pictures, arrange meetings, edit inspection lists,

SMART decision making

Access for all the relevant information to the relevant people anytime anywhere. This app makes all information related to substation maintenance, inspections and monitoring available on web and mobile app from server access. This helps decision making , records keeping , information availability and ease of access .

Costs reduction

Cost reduction in monitoring installations, and HV assets life extension.

Down time reduction

The system evaluates all the data in a matter of seconds and does the most advanced artificial intelligence analysis and limits comparison to international standards.

The Smart affordable wireless monitoring enables commercially viable monitoring on all relevant parameters on one platform irrelevant of the equipment manufacturer with integrated alarms and notifications with single click and virtual intelligence data evaluation

PowerView
Testing & Monitoring Equipment

Cloud digital substation

True Digital Electrical Substation with all existing substation element real electrical test, visual inspection, thermal and corona inspection and monitoring and asset monitoring

Issues history

The first system offering one click specific element data upload, the first system which integrates different parameters (electrical, monitoring, visual ,thermal and corona inspections).

Electrical tests

This software can directly import test reports from existing manufacturers, process the test reports and analyze test results and compare to preset limits against international standards. For each element there is a complete list for all possible electrical tests created according nameplate information (example voltage category , vector group and connections type etc) . All tests are divided depending on importance and the system only trends ones that user actually tests.

Special algorithms do most accurate temperature correction of the results and on import results from test reports. The software automatically compares all test results against international standards recommendations , rate of change limits , testing intervals performs risk assessment and automatically suggests further tests (if necessary)

Results upload permissions are arranged in the most natural way and are editable by account administrator.

Integrated diagnostic tools

Integrated automatic element analysis
And data evaluation

Preset editable lists for visual, thermal and corona and electrical tests

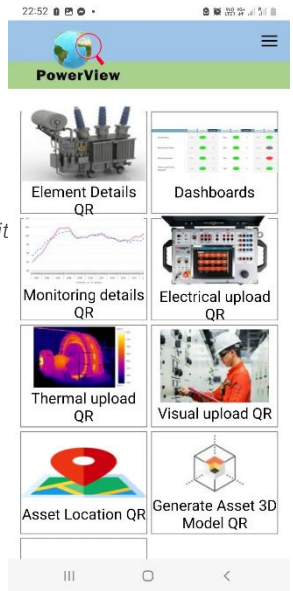
Integrated 3rd party limited or unlimited substation data analysis

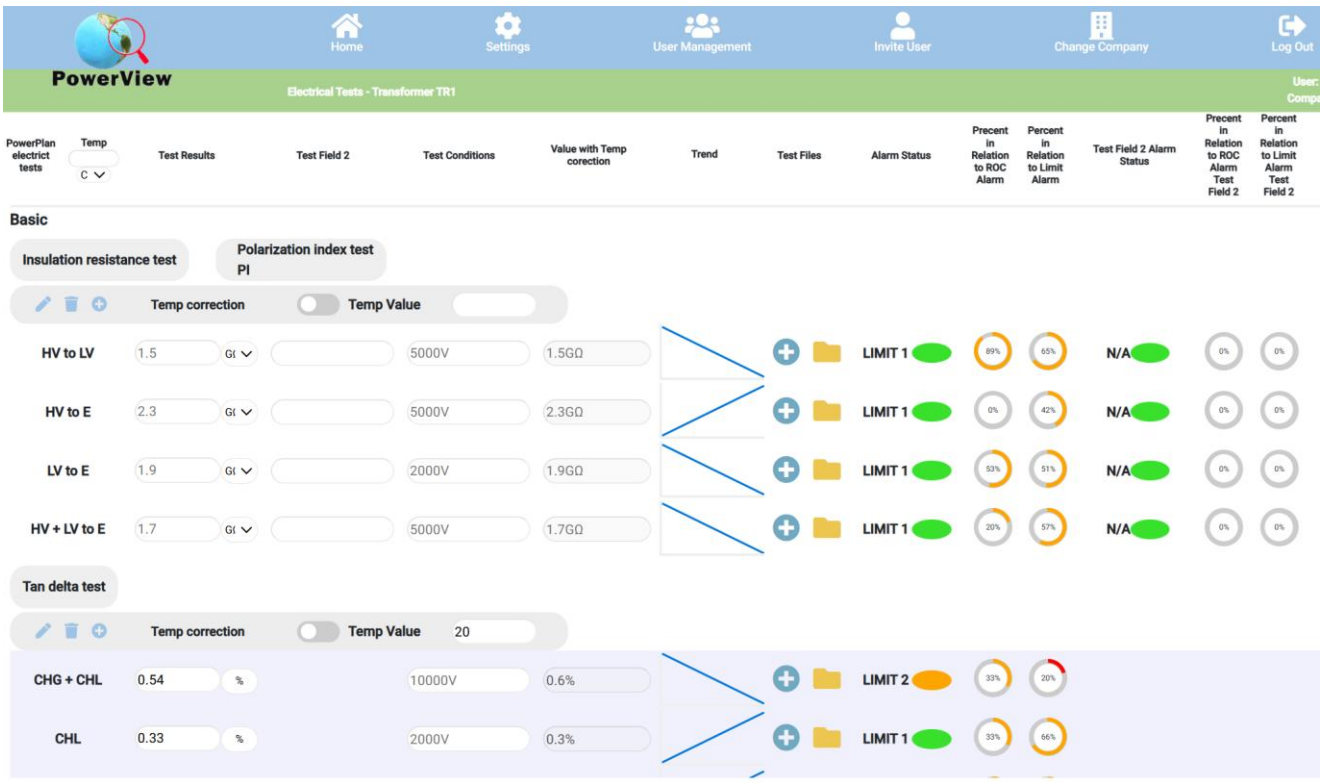
Mobile app

Complete substation maintenance application software with all electrical tests with diagnosis , all inspections and wireless monitoring cloud SCADA wit diagnosis for complete reliable HV asset risk assessment

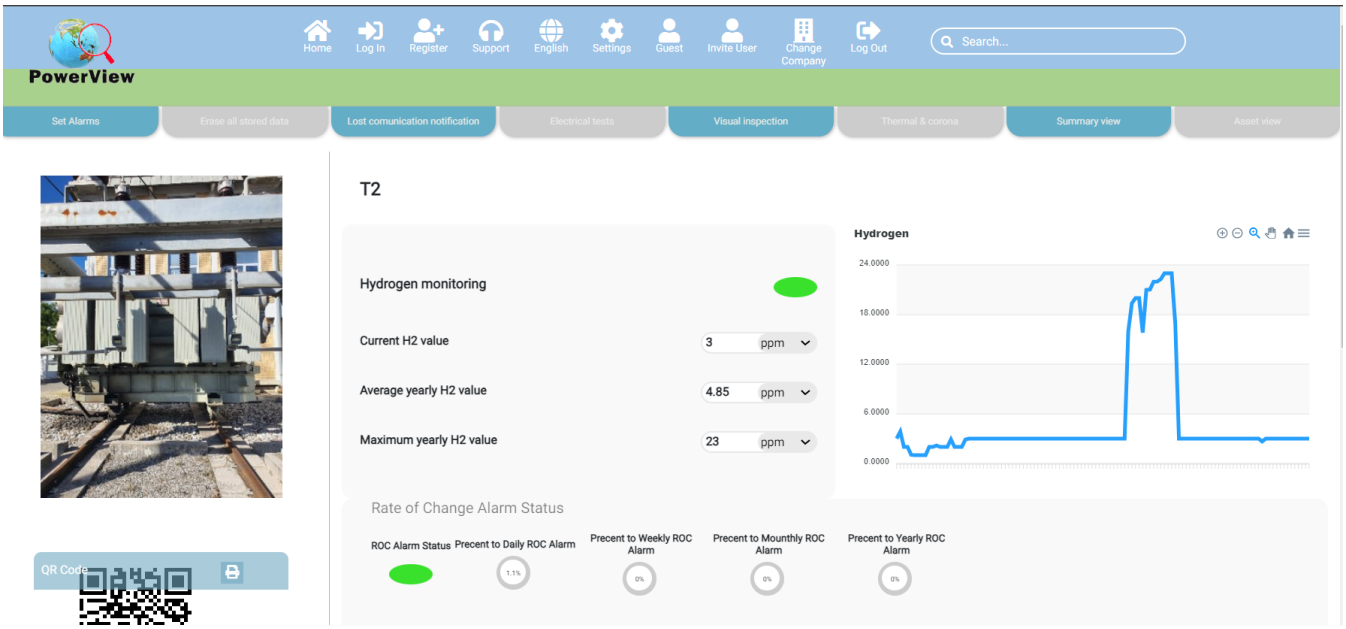
GET IT ON Google Play

Download on App Store



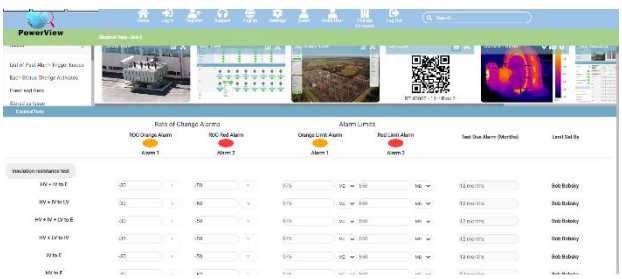


- Combined monitoring view on all existing elements
- Simple 3 step monitoring connection in less than 10 minutes
- Monitoring integration of more than 1000 existing monitoring devices from various manufacturers such as ABB, Siemens, Iris POWER, Doble, POWER VIEW with alarms integrated
- Simple notification divided by elements Types , type of inspection , monitoring
- Editable access list and online meeting platform
- Most advanced integrated power grids evaluation monitoring reporting, management and remote support solution



Limits

Preset limits are assigned in the software for each element type according International standards (having in mind elements nominal characteristics such as operating voltage, type of insulation, connection type etc.) These limits are automatically assigned to each new element. Users with adequate permissions can edit these limits. There are several million different models (with different limits which can be assigned to an element.



This software can also integrate and communicate with big number of existing monitoring devices. This was particularly important for users that already have monitoring equipment from different manufacturers. The software was developed in a way which made it possible for them to continue using the equipment that they already use .

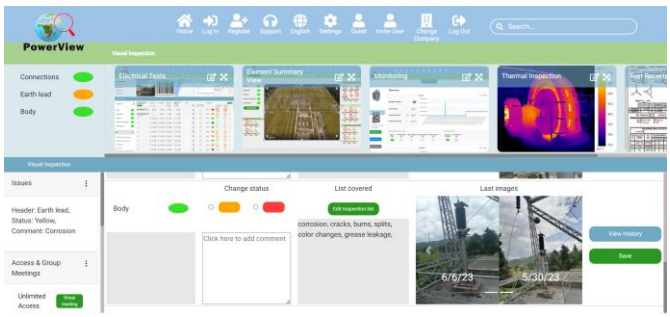
SUBSTATION DIGITAL

Complete substation maintenance application software with all electrical tests with diagnosis , all inspections and wireless monitoring cloud SCADA with diagnosis for complete reliable HV asset risk assessment

Thermal and corona inspection
With history, comparison, meeting options, comments, predefined inspection lists and recommendations due, alarming and meeting options .

Mobile application for IOS and Android

Direct thermal pictures upload from existing thermal and corona cameras .



Visual inspection

A smart visual inspection app (integrated into the web app and mobile app) offers users the ability to keep track of visual inspection , and integrate the data into the asset records. With simple QR code scan user can directly upload a picture , change status and report an issue for visual inspection directly from the field . This application has dynamic preset editable list of visual inspections for each particular HV element in relation to it's nameplate (such as voltage level insulation type etc) . There is also help for each inspection which guides operators with suggestions and recommendations.

Thermal and corona inspection

A smart thermal and corona inspection app (integrated into the web and mobile app) offers users the ability to keep track of thermal and corona inspection and integrate the data into the asset records. With simple QR code scan user can directly upload a picture, change status and report an issue for thermal and corona inspection directly from the field.

This application has dynamic preset editable list of visual inspections with help for each particular HV element in relation to it's nameplate (such as voltage level insulation type etc) . There is also help for each inspection which guides operators with suggestions and recommendations.

Monitoring

Centralized wireless monitoring, data management alarms and notifications. This feature currently integrates over 1000 different commercially available monitoring units from different manufacturers into the software. The wireless electronic devices communication includes one router which covers the entire substation and reads data from up to 1000 devices installed in the substation (area of several square kilometers).

This dramatically reduces expensive installations from several thousand EUR per unit to several hundred of thousand EUR per unit in terms of shielded cabling, expensive SCADA RTU's, and installation costs and reduces waist.

PowerView
Testing & Monitoring Equipment

PowerView
Testing & Monitoring Equipment

Office: 2416 Main street
Vancouver
BC V5T 3E2
Canada

Tel: + 1 (778) 8194363
Fax+ 1 (778) 8194363
Email: info@powerview-energy.com
Web: www.powerview-energy.com

Distributor

GET IT ON Google Play

Download on App Store

pioneering the future of power testing and monitoring