TAL ENGINEERING

TrafoEye®

Monitoring System for Distribution Transformers

View from remote oil level, temp, pressure, low side voltage, low side current, harmonics, get alerts

The TrafoEye® is a monitoring system which consists of transformer control units and a user software package.

Transformer control unit

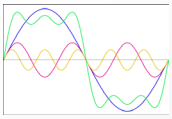
Distribution transformer

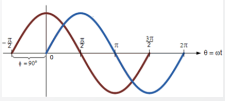
The system provides:

- View from remote on transformer parameters (temp, oil level, current, voltage, etc.)
- Alert on any deviation from normal transformer parameter limits.
- View on the voltages and faults along the HV (High Voltage) net to which the transformers are connected.

The TrafoEye® system continuously collects the following data from the distribution transformer and transmits it via cellular Internet (IoT) to any computer

1. **Temperature of the transformer**
2. **Oil level of the transformer**
3. **Pressure**
4. **Voltage of output phases**
5. **Current of the output phases + Neutral**
6. **Harmonic currents in each phase**
7. **Current lag in each phase**
8. **KWh** — **Energy delivered over a time interval (KWh)**

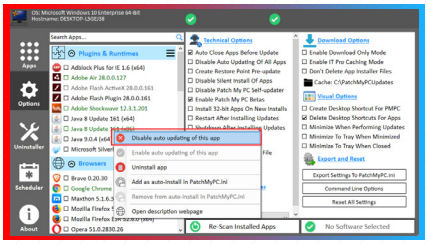




The current and the voltage on the low side of the transformer are measured via the CV1000 sensor which is bolted on the low voltage bushings (see CV1000 data sheet).

The TrafoEye® software package:

The TrafoEye® comes with a user interface software package.
The software package enables authorized users to:



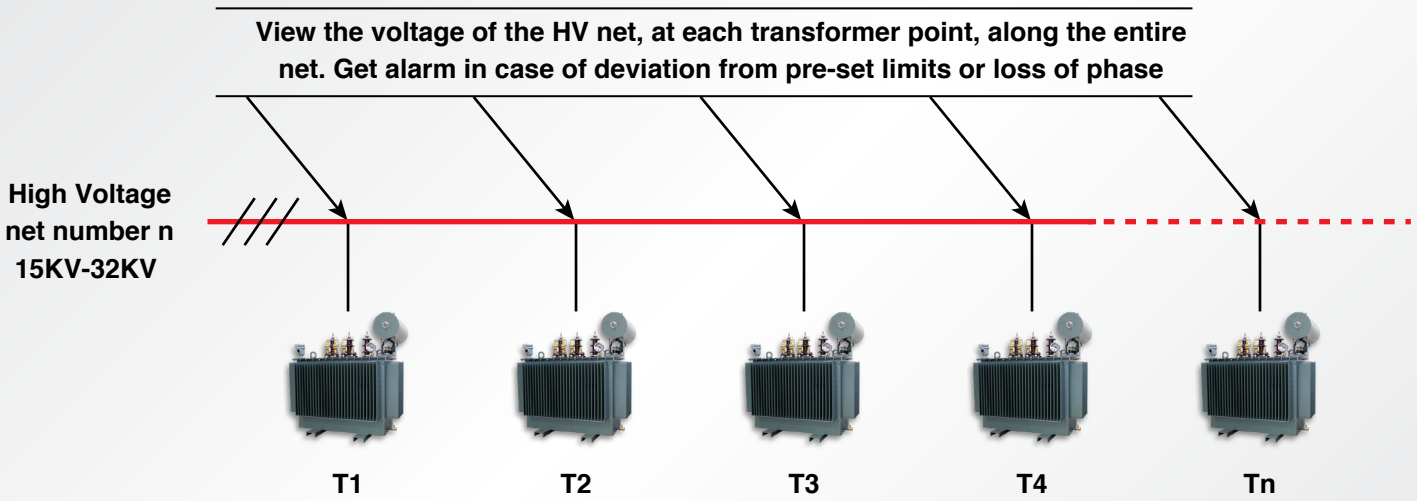
1. Set alarm levels for each of the 8 transformer parameters.
2. Get automatic alarm indication in case an alarm level is crossed.
3. View in real time, the parameters in digital or graphical presentation.
4. View historic values for each of the parameters.
5. View the ID card of the transformer.
6. View and get alerts on the voltages and faults along the HV net to which the transformers are connected.

TAL ENGINEERING LTD. | 03-9612387 | trafoeye@taleng.com | www.taleng.com

HV net monitoring:

Since the software reads in real time the output of each transformer along the HV net to which the transformers are connected, it has a complete overview of the entire HV net. Therefore, the voltages along the HV net can be viewed through monitoring the secondary voltages of the transformers and any fault along the high voltage net is detected immediately by the software and is informed and displayed to the authorised users. There is no direct contact to the HV net.
The HV net faults include:

1. Voltage drops along the HV net.
2. Loss of phase(s).



How does it work?