HVEX
Driving Innovation

OMNI TRAFO

TRANSFORMER MONITORING SYSTEM

www.hvex.com.br

OMNI TRAFO

Description

The Transformer Monitoring System HVEX Omni Trafo was developed to integrate electrical power transformers from distribution networks with smart grids.

This equipment sends real-time information, enabling remote management of important network data such as: voltage, current, power, energy, overload, among others, mapping its operation, allowing analysis of asset lifespan, and measuring both technical and non-technical losses.

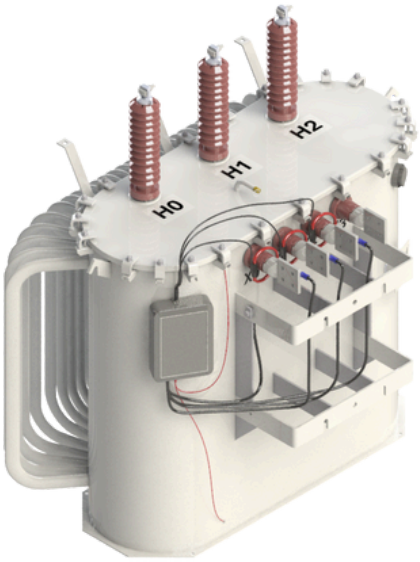
As a semi-distributed meter, it provides energy balance between the feeder and the consumption centers. The equipment sends data remotely, improving the information structure with systemic forecasts and hourly seasonal billing.

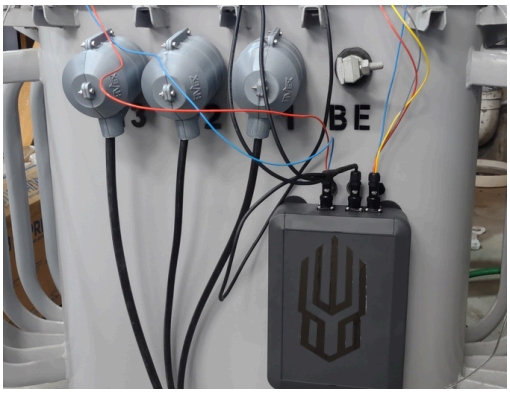
Benefits:

- Consumption and expenditure history
- Transformer self-diagnosis
- Proposes a new meter standard ideal for commercial, industrial consumers, and networks with non-technical losses.

Operation

- Power outage detection;
- Supervisioning and measuring low voltage of the transformer (voltage and current);
- Power factor;
- Current and voltage harmonics;
- Voltage, current, and load imbalances;
- Measurement of the energy balance for comparison and identification of technical and non-technical losses.
- Wi-Fi technology is standardized by IEEE 802.11, which defines the related protocols. This type of communication can be implemented at different frequency levels, but the most common one, also applied to Omni Trafo, is 2.4 GHz.





OMNI TRAFO

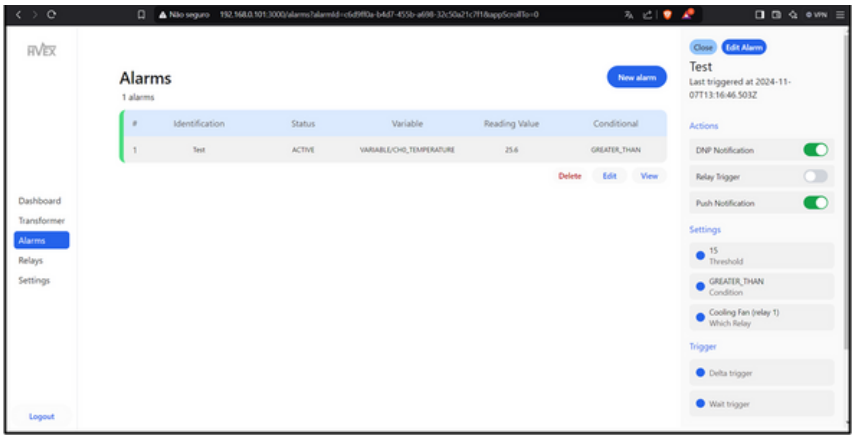
Web platfotm

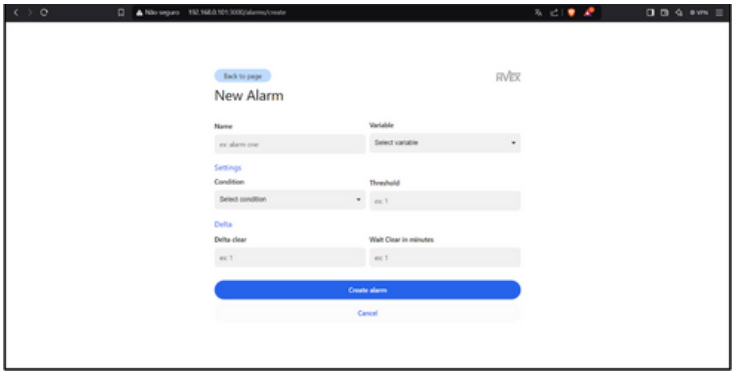
- Customer, user, and installation management;
- Intuitive, consolidating information for the administrator;
- BI tools;
- Platform for data visualization;
- An excellent tool for energy management in consumers with mini or micro photovoltaic generation: the meter is located at the connection point with the utility company.

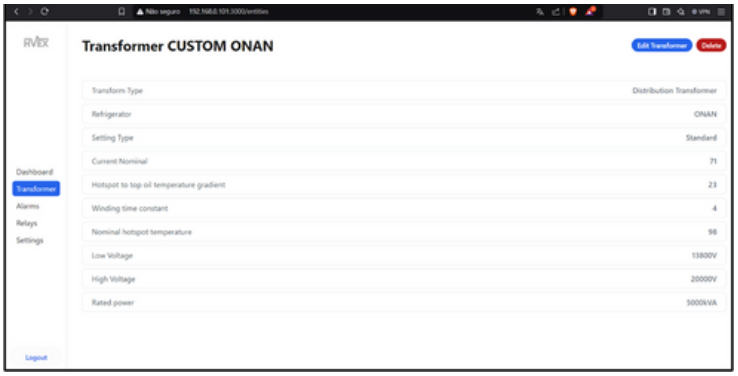
Advantages

- Low measurement cost;
- Fraud-proof, as the measurement instruments are internal to the transformer;
- A sensor network around the board will detect any fraud attempt;
- Improved analysis quality by reducing the sample collection space, clearly defining transformer performance, its expected performance, and the possible reallocation of productive resources.

Through communication, it is possible to obtain technical data via a web interface for asset mapping. The online platform provides consolidated data in a graphical format to facilitate user analysis.







OMNI TRAFO

Coupling magnets

Complete set

Technical Specifications

Measurements	Frequency	45 - 65 Hz
	Current	0 ~ 1000 A
	Voltage	0 ~ 380 VAC
Power supply	Three-phase	85 - 265 VAC
Connection wires	1P3W, 1P2W, 3P3W, 3P4W	
Phases number	3	
Connection type	Indirect	
Rated voltage	0 - 240 VAC	
Rated current	50 A	
Frequency	50/60 Hz	
Maximum rated current	1000 A	
Cabinet		
Material	ASA（UL94HB）	
Protection degree	IP67	
UV resistant	Yes	
Flame retardant	No	
Weight	646 g	

Technical Specifications

Resources	
Communication	Wi-Fi
Power quality indicators	Supply, quality indicators, events, monitoring
Additional	Alarms, Registers, Memory 18 channels

We provide solutions for improvement of eletrical energy generation, transmission and distribution efficiency, quality and reliability. With a highly specialized and experienced team in research, delvelopment and innovation, HVEX develops tailor-made solutions for brazilian and foreign markets. Wide range of products with solutions focused on signal transduction, measurement, monitoring and protection.

HVEX

Driving Innovation

35 3622-2699

contato@hvex.com.br

www.hvex.com.br

R. Ismael Pinto de Noronha, 86,
Nossa Sra. de Fatima, Itajubá-MG