



OneBoard Transformers

The online dashboard for transformer fleet monitoring, analysis and trending in real-time

Making efficient use of data from an assortment of monitoring devices can be a complex business, especially when interfaces, protocols, data display and analysis procedures differ from one system to another. Managing diverse alarm strategies is no less complicated, while troubleshooting actions, such as manual resets, can lose precious time. The Laborelec OneBoard platform comfortably handles all these issues and more, delivering full fleet control security to operating staff, and powerful analytics to the business.

Effective monitoring: reducing complexity while assuring safety

A typical transformer fleet is a diverse collection of machines of differing ages and designs, and from different manufacturers. With this variety comes a similar diversity in monitoring systems from one machine to another, meaning that operating staff can be confronted with contrasting interfaces and software, and non-standard data transfer and analysis processes. Not surprisingly, it can also be a challenge to keep ahead of all the alarm systems in these circumstances. Operators need a system that reduces this complexity, while assuring safety.

The cloud-based all-in-one dashboard

OneBoard Transformer, Laborelec's real-time, secure, cloud-based dashboard puts vital status information about the whole transformer fleet and individual assets at the operators' fingertips. Measurement data from connected devices are displayed alongside lab reference data and rationalized alarm information, all in one ergonomic interface, readily consultable from anywhere in the world. Data transfer is rapid and robust, and far less troubleshooting is required. In addition, the diagnostic, analysis and trending features provide vital information for maintenance planning and purchasing decisions.

Benefits

Better asset management

- ♥ **Information all in one place**
Transformer status data and reports are gathered and displayed centrally, for easy monitoring.
- ♥ **Secure**
The platform was built in close collaboration with ENGIE Laborelec cybersecurity experts.
- ♥ **24/7 availability**
Web-based interface can be consulted and managed at any hour.

Better decision-making

- ♥ Colour codes signal which actions need to be taken for each individual asset in the fleet.
- ♥ OneBoard gives a full overview of the status of the fleet, including trend-based prioritization of monitoring, maintenance, repair or replacement needs.
- ♥ Dashboards display at-a-glance trending data, in graphical form, with comparison data over time, helping operators plan servicing schedules, make lifetime assessments and fully-informed investment decisions.
- ♥ Trends can be spotted early so that failures are prevented, saving time, money and resources.



How it works

The 4 elements of the OneBoard platform for transformers

Fleet dashboard

On the fleet dashboard, the user gets a status overview of all the assets in that fleet. It displays a summary of data from online monitoring devices as well as from laboratory analysis.

Asset dashboard

The asset dashboard displays the more detailed data about the status of the selected asset. It allows an expert or a technician to do the first quick analysis in case of a problem.

Reports

The Reports tab displays all available reports linked to the selected asset or to any of the assets of a certain fleet. All reports are downloadable for offline use.

Analytics

Diagnostic tools allow operators to make a rapid initial analysis to aid readiness, so that they can give a more focused field response. Any of the measurement data associated with a selected asset or fleet can be displayed as a graph. Selected data can be downloaded in Microsoft Excel compatible format for further processing using the customer's own algorithms.

OneBoard Transformer, all-in-one dashboard for the monitoring of fleets of machines

	Asset Name	Last Real-Time Data	Real-Time Recent Data?	Real-Time H2 (ppm)	Real-Time H2 Hourly Trend (ppm/24h)	Real-Time H2 Daily Trend (ppm/30d)	Last Labo Analysis	Internal Transformer Condition	Oil Quality	Paper Degradation	Corrosive Sulfur
CA	Amercoeur GT	04/15/2017 1:53 AM	●	98.00	-0.10	1.20	03/29/2017 2:00 AM	●	●	●	●
CA	Amercoeur ST	04/15/2017 2:01 AM	●	142.00	0.50	1.00	03/29/2017 2:00 AM	●	●	●	●
CA	Coo GR1	07/12/2017 5:04 PM	●	126.00	-8.20	37.10	02/02/2017 1:00 AM	●	●	●	●
CA	Coo GR2	07/12/2017 2:50 PM	●	369.00	-1.50	6.60	05/17/2017 2:30 AM	●	●	●	●
CA	Coo GR3	07/12/2017 3:47 PM	●	158.00	0.10	-1.60	05/17/2017 2:30 AM	●	●	●	●
CA	Coo GR4	07/12/2017 3:43 PM	●	130.00	-0.50	8.30	05/17/2017 2:30 AM	●	●	●	●
CA	Coo GR5	06/01/2017 12:34 AM	●	35.00	-1.60	9.00	05/17/2017 2:00 AM	●	●	●	●
CA	Coo GR6	07/12/2017 3:46 PM	●	110.00	1.80	9.60	05/17/2017 2:00 AM	●	●	●	●



OneBoard puts all status information at your fingertips, per transformer and for your complete fleet. (a) The Fleet dashboard displays a summary of data from online monitoring devices as well as expert codes from the latest laboratory analysis. (b) The Analytics section makes it possible to display any data associated with a selected asset or fleet as a graph, e.g. for a rapid initial analysis. Similar data from different transformers can be displayed together so as to facilitate comparison and to detect any deviation.

Setting alarms: the smart approach

OneBoard provides a responsive early warning system watchdog: notifications and alarms are triggered when pre-set thresholds are exceeded.

Pre-defined OEM alarms don't take into account specific customer conditions. ENGIE Laborelec experts make sure the alarms are tuned to the situation, with customers benefiting from decades of transformer experience.

You only get an alarm signal when it's necessary and useful.

Ask for a demo, and more information

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Five reasons for you to choose Laborelec

- Wide-ranging technical expertise in electricity generation, grids, and end-use
- Customers enjoy enhanced profitability and sustainability of energy processes and assets
- Unique combination of contract research and operational assistance
- Independent advice based on certified laboratory and field analysis worldwide
- More than 50 years of experience