EnerLyzer Live

Real-time measurement and signal recording for CMC 430

Turn your CMC 430 into a hybrid measurement and analysis tool

The software tool EnerLyzer Live enhances the CMC 430 with powerful measurement and signal recording functionality. Each of the six binary inputs can be configured as analog measurement input. Voltages up to 600 V_{RMS} can be measured. Currents can be captured by using measurement shunts or current clamps with voltage outputs. The software works in parallel with any Test Universe module or OCC file. EnerLyzer Live deals with digital and analog signals. Sampled Values according to IEC 61850-9-2, as well as conventional signals, can be measured and visualized simultaneously on a common time base.

Wide range of applications

EnerLyzer Live enriches your CMC 430 with a universal measurement toolbox: from a simple multimeter to an oscilloscope, powerful transient recorder or easy to use signal analyzer.

When malfunctions occur in a substation it is essential to trace, verify and resolve such issues as soon as possible. CMC 430 with EnerLyzer Live helps to reveal the causes of the malfunction by an easy and quick analysis of the system's parameters.

Typical tasks:

- Troubleshooting during relay testing or commissioning
- Validity checks (voltages, currents, powers)
- Recording of transients during switching operations
- Analyze motor start-up behavior
- Measure voltages and currents during generator synchronization and synch check
- Analyze transformer inrush
- Diagnose CB (and auxiliary contacts) and isolator timing behavior
- Check system perturbation and power quality (for example THD, harmonics)

Your benefits

- Live observation and analysis of all measurements
- Hybrid measurement and recording of conventional signals, GOOSE and Sampled Values
- Time-stamped measurements using PTP or IRIG-B time source
- Fault recording
- High precision measurement at a high sampling rate (up to 40 kHz)

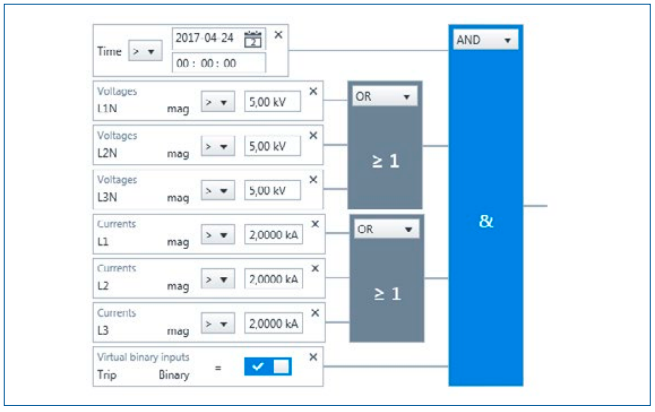
EnerLyzer Live

Oscilloscope view and on-line trend analysis

Instantaneous values and trends of measurements can be observed live and disturbances can be detected immediately. It is possible to represent measured values in different ways and in multiple sheets. The measurement view can be customized to the user's needs.

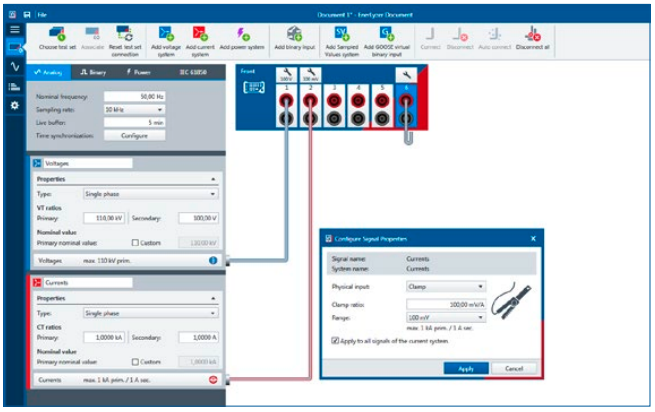
Sophisticated analysis of measurements and recordings

EnerLyzer Live captures recordings up to 20 minutes at a sampling rate of 40 kHz. For sophisticated analysis, a broad range of quantities are available which are calculated even after recording: RMS values, frequency, df/dt, phasors, symmetrical components, active-, reactive and apparent power, power factor, harmonics, THD, and user-defined calculated signals.



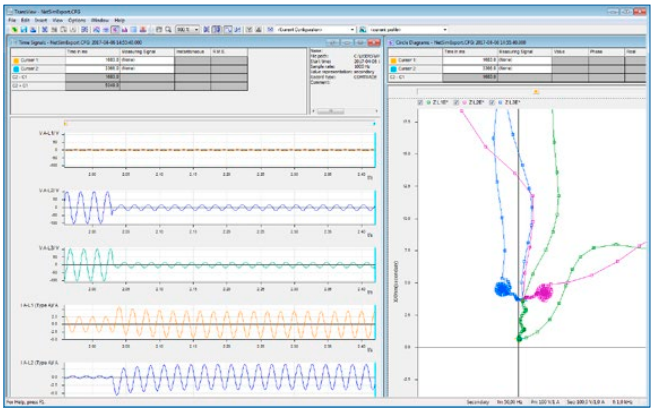
Fault recording

Simple or complex trigger conditions can be set-up to record disturbances or inrush phenomena in the power system. Save your recordings in the dedicated EnerLyzer Live file format or export the data for further analysis as COMTRADE file (C37.111-1991/1999 and 2013) or CSV file.



Configure analog inputs

The intuitive user interface allows quick configuration of the analog inputs. They are configurable as binary input to visualize states or as analog input to capture voltages and currents.



Complementary analysis using TransView

TransView is a software for visualization and analysis of recorded analog and binary signals. It processes the recorded data graphically and calculates further quantities. The quantities can be represented as time signals, vector diagrams, locus diagrams, harmonics bar chart or in value tables.

Ordering information

Description	Order No.
EnerLyzer Live Performs hybrid (conventional and IEC 61850 based traffic – GOOSE and Sampled Values) analog and binary measurement and recording with the CMC 430. On-line signal analysis of instantaneous values, RMS values, frequency, power and harmonics and analysis of recordings. Includes TransView software for additional analysis in locus diagram in the impedance plane and 3 sets of C-Shunt 1 and C-Shunt 10.	P0006593
C-Probe 1 Current Clamp C-Probe 1 is an active AC and DC current probe with voltage output	P0006434
C-Shunt C-Shunt 1 is a precision shunt (0.001 Ω) for 32 A continuous C-Shunt 10 is a precision shunt (0.01 Ω) for 12.5 A continuous	 B0620201 B0620301

OMICRON is an international company that works passionately on ideas for making electric power systems safe and reliable. Our pioneering solutions are designed to meet our industry's current and future challenges. We always go the extra mile to empower our customers: we react to their needs, provide extraordinary local support, and share our expertise.

Within the OMICRON group, we research and develop innovative technologies for all fields in electric power systems. When it comes to electrical testing for medium- and high-voltage equipment, protection testing, digital substation testing solutions, and cybersecurity solutions, customers all over the world trust in the accuracy, speed, and quality of our user-friendly solutions.

Founded in 1984, OMICRON draws on their decades of profound expertise in the field of electric power engineering. A dedicated team of more than 900 employees provides solutions with 24/7 support at 25 locations worldwide and serves customers in more than 160 countries

For more information, additional literature, and detailed contact information of our worldwide offices please visit our website.

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