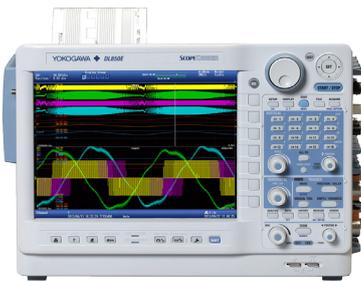


## DL850E / DL850EV ScopeCorder

Measure and analyse a wealth of signals in real-time and speed up development and fault finding

# Precision Making



ScopeCorder -  
DL850E / DL850EV

A ScopeCorder is a powerful portable data acquisition recorder that can capture and analyse both transient events and trends up to 200 days. Using flexible modular inputs it combines measurements of electrical signals, physical (sensors) and CAN / LIN / SENT serial buses and is able to trigger on electrical power related and other calculations in real-time.

### Flexible and swappable input modules with built-in signal conditioning

Choose from 19 input modules to configure a ScopeCorder up to 128 channels and gain a thorough insight into any application by synchronising the measurement of different types of electrical and physical signals.

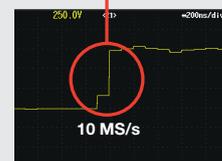
- Voltage & currents with isolation up to 1000V
- Sensor outputs
- Temperature, vibration, Acceleration, strain and frequency
- Logic signals & CAN / LIN / SENT



### Precise Measurement of Fast Switching Signals Even in the Harshest Environments

Individually isolated and shielded input channels provide high-resolution up to 16 bits and high sample rates up to 100 MS/s.

Rising waveform not completely captured



Rising waveform accurately captured



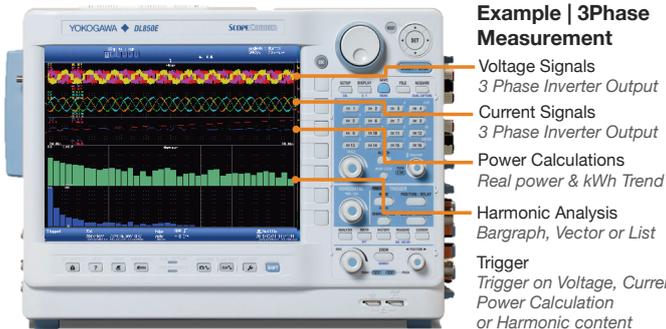
Example: Same inverter output waveform measured at 10 MS/s and 100 MS/s

### Real-Time DSP Maths

Unlike a digital oscilloscope which can only perform mathematical calculations once the acquisition is complete, the ScopeCorder /G3 DSP option enables calculations to be performed in real time whilst the acquisition is in progress. The results of DSP Maths channels can therefore also be used to trigger the acquisition. The 35 types of diverse functions, which can be utilised include digital filtering, integration, differentiation and higher order equations.

## New Real-Time Evaluation of Dynamic Behaviour within Power Applications

By default the ScopeCorder is equipped with a set of basic arithmetic mathematical functions such as addition, subtraction, division, multiplication, fast Fourier transformation and other computations. The new Power Analysis option (/G5) can trend calculations such as active power, power factor, integrated power, harmonics and more. This way a ScopeCorder can capture and trigger on voltage and current values and real-time calculations of power as well as other electrical and physical parameters. These measurements are thus combined in a single measurement overview.

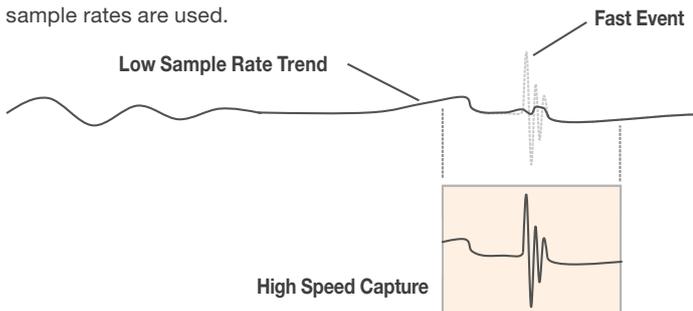


### Example | 3Phase Measurement

- Voltage Signals  
*3 Phase Inverter Output*
- Current Signals  
*3 Phase Inverter Output*
- Power Calculations  
*Real power & kWh Trend*
- Harmonic Analysis  
*Bargraph, Vector or List*
- Trigger  
*Trigger on Voltage, Current, Power Calculation or Harmonic content*

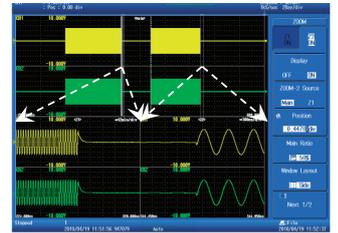
## Capture High-Speed Transients During Long Term Recording – Dual capture

‘Dual capture’ enables 5000 separate transient events to be captured at sample rates up to 100MS/s even while a long term durability test is being recorded at sample rates up to 100kS/s. This means that sudden transitional phenomena are not missed even when slow continuous sample rates are used.



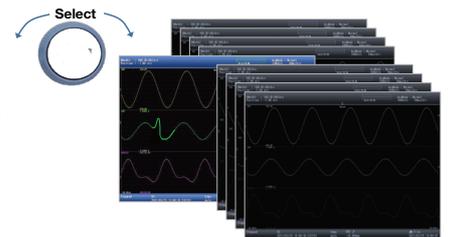
## Giga Zoom 2 Engine

A ScopeCorder is equipped with the revolutionary Giga Zoom 2 engine, a powerful processor designed to seamlessly access 2 billion samples of data. 2 separate zoom windows can be displayed along with the entire original signal, which means that both the cause and the effect of an anomaly can be easily analysed in detail.



## Isolate and analyse waveforms - History Memory

The ‘History’ memory in a ScopeCorder is always active and automatically divides the available acquisition memory in up to 5,000 ‘history waveforms’. All history records can be displayed immediately after measurement is stopped. Any abnormal phenomenon, which normally disappears from the screen after a new trigger and acquisition, is still available. Condition-based searches will quickly isolate a specific waveform which can then be extensively analysed.



# ‘Reduce Time Spent on Fault Finding’

## DL850EV ScopeCorder Vehicle Edition

The special edition is designed for engineers working in the automotive and railway industry. CAN, LIN and SENT bus data, transmitted by the powertrain management system, can be monitored and thus combined with the measurement of electrical signals and physical performance parameters from sensors.

The ScopeCorder can therefore provide a thorough insight into the dynamic behaviour of the electromechanical system. This results in a considerable saving of time compared to other approaches such as PC software analysis.

### 3 Year Warranty

The quality and reliability of a ScopeCorder is supported by a standard 3 year warranty.

Sensorik  
Messtechnik

**nbn**

A-8010 Graz Riesstraße 146  
Tel.: +43 316 402805 | Fax: 402506

ELEKTRONIK  
Handelsgesellschaft m.b.H.