

# Precision Making



### ScopeCorder - DL350

The DL350 ScopeCorder combines in one compact instrument all the measurement and recording capabilities you need when you are away from your office or lab.

High-speed signals or long-term recording, 'quick and simple' or sophisticated operation, the DL350 provides the flexibility you need when you need it. YOKOGAWA

### DL350 ScopeCorder

# Complete measurements complete portability

Capture, display, record and analyze the widest variety of electrical and physical parameters in automotive, transportation, electronics, energy and mechatronics.

## Superior noise and vibration-proof flexible recording in a single portable tool

Offering channel counts up to 8 analogue and 16 digital, sample rates up to 100 MS/s, isolation up to 1 kV and resolution up to 16-bit, the range of modules enables the DL350 to be configured for a multitude of long and short term measurement applications.

# Choose from 18 types of input module, which are compatible with other ScopeCorders

- Voltage & currents with isolation up to 1000 V
- 1000 Vrms (CAT II) , 600 Vrms(CAT III) and RMS measurements
- Temperature, vibration, acceleration, strain and frequency
- Logic signals & CAN / LIN / SENT
- 16 channel voltage and temperature scanners



### Intuitive operation

An 8.4-inch, resistive touch screen has been adopted in order to deliver superior, noise-free performance. In environments with the highest levels of electrical noise such as motors and inverters, measurement precision is maintained while enabling the unit to be operated using (gloved) fingers or stylus. A choice of 'Scope' mode or 'Recorder' mode enables greater flexibility in operation.

# Use it like a data acquisition system or a long memory oscilloscope

Up to 5 G points of data per module can be recorded directly to an SD card. This means that the DL350 can be used for continuous recording for up to 50 days. For high-speed signals, up to 100 Mpoints per module of internal memory is available to capture fast transients. This is up to 10,000 times more than other portable oscilloscopes or test tools, and so the DL350 enables signals to be captured at a higher sample rate for much longer periods.

### Test&Measurement





### Mains, DC or rechargeable battery power

The built-in rechargeable battery provides 3 hours of continuous operation for mobile measurements or can serve as a backup power supply if the main DC power is disconnected. This makes the DL350 a highly reliable ScopeCorder for tests which are difficult or expensive to repeat.

# Verify power line quality using harmonic, power or FFT analysis

The power in single- and 3-phase systems can be evaluated. For fundamental frequencies of 50 or 60Hz, up to 40 harmonic orders can be analysed. Alternatively use the suite of FFT functions to perform full frequency analysis.

### 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.



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

### Isolate and analyse waveforms – History memory

In Scope mode the "History" memory in a DL350 is always active and automatically divides the available acquisition memory in up to 1,000 "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. The DL350 can automatically measure the parameters of the history waveforms and process them statistically to provide a measurement of how the captured waveforms vary for each trigger.



#### Advanced features to support in-vehicle testing

Use the DL350 with the /VE option and a bus monitor module to decode CAN bus, LIN bus or SENT signals and display information such as engine temperature, vehicle speed and brake pedal position as trend waveforms and compare this data with the analogue data coming from the actual sensors.

This enables automotive engineers to gain a thorough insight into the dynamic behaviour of the complete electromechanical system, thus saving considerable 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.

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