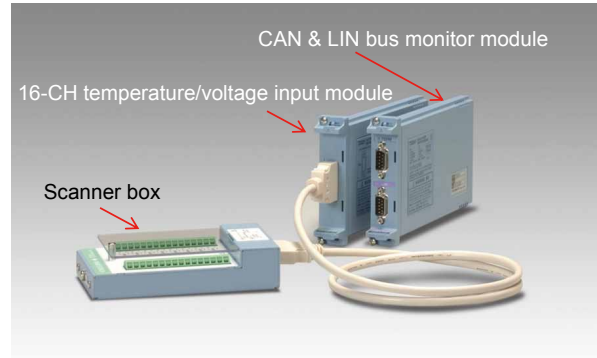# New Modules for DL850/DL850V
16-CH Temperature/Voltage Input Module
CAN & LIN Bus Monitor Module

SCOPECORDER

The DL850/DL850V ScopeCorders are modular signal waveform recording instruments that can synchronously measure various signals such as voltage, current, strain, and acceleration. They measure multiple physical signals for long periods at development centers in the mechatronics field where excellent noise-resistance is required. The DL850 standard model, and the DL850V vehicle edition with functions for enhancing the development of devices for automobiles, are available. With the addition of new two modules to the lineup, a total of 17 plug-in modules can be used for diverse measurement applications.

FEATURES

■ 16-CH temperature/voltage input module

1) The 16-CH temperature/voltage input module is a multi-channel input module that can measure up to 16 channels (subchannels) of temperature (TC: thermocouple) or voltage (DC) by a single module. It consists of a module body and an external scanner box. RJC circuits are incorporated in the external scanner box.

2) The input section is isolated between GND and terminal blocks and between subchannels.

3) The module uses the $\Delta\Sigma$-type A/D conversion method. The digital filtering function, which is based on oversampling, reduces the noise effect and ensures highly accurate measurement.

4) The fastest data updating period for 16 channels is 100 ms. The bandwidth limit (600 Hz, 200 Hz, 50 Hz, or 10 Hz) is automatically set based on a selected data-updating period to reduce the noise effect.

■ CAN & LIN bus monitor module

1) The CAN & LIN bus monitor module interprets the CAN protocol or LIN protocol for in-vehicle communication networks to monitor communication data on the bus and displays its time series trend waveform. It is connected to the CAN bus or LIN bus as one node and reads communication data of each protocol on the bus.

2) Working together with other input modules, not only communication data on the CAN or LIN bus, but also temporal changes in analog data such as voltage, temperature, sensor signals and logic signals of the electronic control unit (ECU) can be measured simultaneously. It displays them as trend waveforms and saves them to files.

SPECIFICATIONS

■ 16-CH temperature/voltage input module

Number of input channels: 16

Input coupling: TC (thermocouple), DC (voltage), GND

Data updating period: 100 ms/300 ms/1 s/3 s (selectable)

Input type: Isolated unbalanced

Configurable range of voltage-axis sensitivity:
    1 mV/div to 2 V/div

Supported types of thermocouples (for temp. measurement):
    K, E, J, T, L, U, N, R, S, B, W, and Au/Fe-chromel

Maximum input voltage: 42 V (DC + ACpeak)[*1]

Maximum allowable common mode voltage:
    42 V (DC + ACpeak)[*1]

Common mode rejection ratio (for temp. measurement):
    140 dB or more (at data updating period of 3 s)
    (50/60 Hz, typical)

■ CAN & LIN bus monitor module[*2]

LIN port specifications

Input voltage range:
    −1 V to +18 V (between LIN input and GND)

Input connector: D-sub 9-pin male

Supported protocol: ISO 9141 physical layer

Supported communication bit rate: 2400, 9600, 19200 bps

Number of input channels: 60 signals/port

Supported data length: 4 bytes maximum

(The CAN port specifications are the same as the 720240 CAN module.)

*1: CAT I and CAT II, 1 kHz or less

*2: For DL850V only. Up to two modules including the 720240 module can be installed in one unit.

Contact us

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