CAN Newsletter Online

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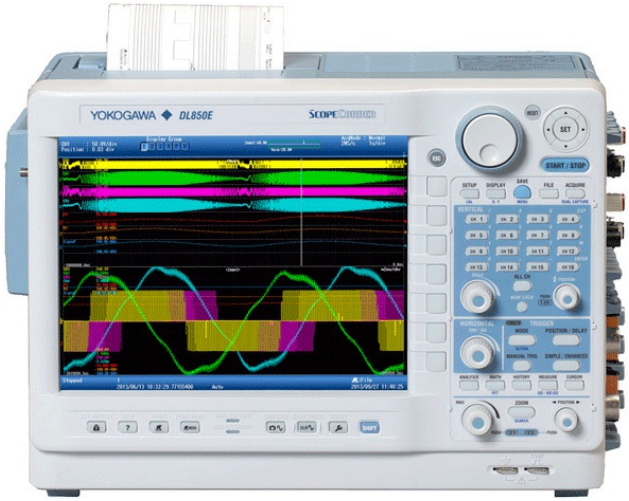
Combining Sent and CAN modules

Yokogawa's DL850E Scope Corder is a portable data acquisition recorder and oscilloscope that can capture and analyze both transient events and trends up to 200 days. Sent-monitoring has been added to its CAN capabilities.

Using flexible modular inputs, the Scope Corder combines the 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.



(Photo: Yokogawa)

Three plug-in input modules for the DL850E/DL850EV Scope Corders were released last year: a 4-channel isolated module (sampling rate: 1 megasamples/s, resolution: 16 bits), a high-speed isolated module (sampling rate: 100 megasamples/s, resolution: 12 bits), and a Sent-monitoring module. This brings the total of available input modules to 19 and expands the usage of applications that can be handled by the DL850E/DL850EV Scope Corders.

The Sent-monitoring module, which is only available for DL850EV, is an industry first. This module enables a general-purpose measuring instrument to monitor the transmission of data using the Sent protocol. This module can be used in the development and production of automobiles that employ Sent output sensors and in applications whereby changes in physical quantities are cross-checked with Sent output values to determine their level of consistency. Up to four Sent modules can be integrated into a DL850EV. Alternatively, they can be combined with a CAN module or a CAN/LIN module.

Development Background

With the growing awareness of the need to save energy and protect the global environment, there is a push to make electric and electronic devices, home appliances, and vehicles more energy efficient. To reduce energy consumption, it is particularly important to produce more efficient inverters and motors, which requires the measurement and evaluation of many different items during the development phase. In addition, as the use of renewable energy and smart grids is growing rapidly, there is an increasing need in the electric power and energy markets for the ability to record many different signals at high speeds.

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