



# **SL2000** High-Speed Data Acquisition Unit

# Versatility to discover more

The SL2000 captures and analyses a wide variety of electrical, physical sensor signals and serial buses data. It offers a unique combination of high sampling rates, for a detailed view and long recording time to monitor trends over time.



# **High-Speed Data Acquisition**

Whether the measurement signals are derived from the smallest electric drives incorporated in a precision watch, a large turbine found in a power generating facility, sensors and electronics found in a modern electric vehicle or coming from household appliances, the features and flexibility that come with the SL2000 offer value to all these applications.

- Transportation
- Renewables
- Home & Industrial Appliances

- Up to 32 analog or 128 digital channels
- Measure up to 50 days, or stream continuously to a PC.
- High-speed sample rate up to 200 MS/s
- 12-bit, 14-bit or 16-bit waveform resolution
- Up to 8 Gpoints of acquisition memory
- Enhanced real-time computations

# Swappable input modules with built-in signal conditioning

Choose from 20 input modules to configure a SL2000 up to 128 channels and gain a thorough insight into any application by synchronizing the measurement of different types of electrical and physical signals.

- Voltage and current with isolation up to 1000V
- Mechanical sensor outputs
- Temperature, vibration / acceleration, strain and frequency
- Logic signals & vehicle serial bus (CAN / CAN FD / LIN / SENT)



# Precise measurement of fast switching signals

The housing for the input modules includes both shielding for the single input channel and extra shielding for the housing of the input module. Using this double shielding method results in high noise rejection and low channel interference even in the harshest environments.

## 200 MS/s, 14-bit Isolation Module (720212)

- Two channels
- Optical isolated inputs of up to 1000 V
- Up to 20 seconds continuous measurement

# 10 MS/s, 16-bit Isolation Module (720256)

- 4 Channels
- Isolated inputs of up to 600 V
- Enables up to 32 analog channels in a single SL2000



# Test&Measurement



# **Real-time calculations**

A unique set of real-time mathematical operations offers edge processing, saving valuable time in analyzing and post processing the measurement data. It also allows to trigger on real-time math channels creating solutions for complex measurement tasks.

- Real-time math
- Power math
- Motor analysis, Clarke and Park Transforms

# Application driven menu

The SL2000 simplifies measurement setup for various applications. Simply press the application button and get started. A guide trough wizard enables easy setup of frequently used applications such as:

- Long term data recording
- Power line monitoring
- Motor and inverter test
- Physical phenomena analysis



# **Optimised for high-speed DAQ**

The SL2000 is a data acquisition unit optimised for a high-speed operations. It supports a rich set of features that enable users to acquire, optimise and store multi-channel waveform data up to 50 days or stream continuously.

### 8 Gpoints of acquisition memory (/M2)

■ Up to 200 MS/s – 16 channels

# High-speed PC streaming (/C60)

- Via 10 Gbps Ethernet (optical)
- Up to 20 MS/s 8 channels
- Up to 10 MS/s 16 channels

#### Normal PC streaming

- Up to 2 MS/s 1 channel
- Up to 200 kS/s 16 channels

## SSD 512 GB Hard disk (/ST1)

- Up to 2 MS/s 1 channel
- Up to 200 kS/s 16 channels

## Flash acquisition 160 GB

- Up to 20 MS/s 8 channels
- Up to 10 MS/s 16 channels)

# Multi-unit synchronisation (/C50)

Extend the number of measurement channels by synchronizing up to 5 SL2000's or a combination of DL950 and SL2000

- Up to 160 input channels
- Synchronization using optical transceiver 720941 and fiber optic cable 720942.
  Synchronize
  - Synchronize measurement start/stop, trigger and sample clock.



# Why choose the SL2000 High-Speed Data Acquisition unit?

**Insight** – The SL2000 measures signals at a high-bit resolution and secures data in the harshest environments with superior noise-immunity and isolation technology.

**Versatility** – Equipped with a selection from over 20 types of input modules, with built-in signal conditioning, data acquisition unit combines a wealth of measurements of electrical-, mechanical and decoded vehicle serial bus signals.

**Usability** – The SL2000 contributes to the needs of automated measurement via PC while edge computing minimize time spend on analysis of measurement data.

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