

Leaflet

# 16CH Voltage Input Module [DL950/SL2000]

Industries: EVs & Transportation, Motors & Drives, Appliances, Industrial & Consumer Electronics

## Challenges

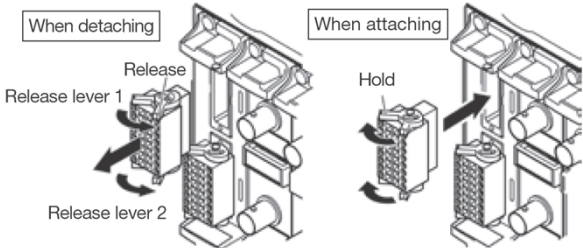
- Measuring voltages, including control signals, with isolated multi-channel inputs.
- Achieving a sampling rate faster than 1 ms of conventional data loggers.
- Measuring high voltage, temperature, and vibration simultaneously.

## Solution: 16CH Voltage Input Module 720220

- A single 720220 module provides isolated measurement of 16 voltage channels using a scanning method.
- Up to 128 channels with 8 modules, or up to 640 channels when five units are synchronized.
- Maximum sampling rate of 200 kS/s (5  $\mu$ s) with 16-bit resolution.
- Individually configure input conditions such as range and display settings including position and zoom for each channel.
- Combine with other modules to simultaneously measure high voltage, temperature, vibration, and strain.

### Recommended wires for connection

- 0.20 mm to 1.00 mm (solid or stranded)  
Strip approximately 7 mm of insulation from the wire end before connecting.
- AWG size: 24–18



720220



SL2000 + 720220×8

## Key Specifications

Input channels	16
Input type	Isolated unbalanced Isolated (GND-terminal), non-isolated (CH-CH)
Input coupling	DC, GND (Selectable for each sub-CH)
Maximum sample rate	200 kS/s (single CH) [10 kS/s when using 16 CH]
Frequency range (-3 dB)*1	DC to 5 kHz
A/D conversion resolution	16 bit (2400 LSB/div)
Voltage-axis sensitivity setting	200 mV/div to 2 V/div (1-2-5 steps)
Maximum input voltage (1 kHz or less)	Direct input: 42 V (DC + ACpeak)
Maximum rated voltage to earth (1 kHz or less)	Direct input: 42 V (DC + ACpeak) (CAT II, 30 Vrms)
Vertical (voltage) axis accuracy	DC accuracy: $\pm(0.3\%$ of 10 div)
Bandwidth limit	Full/500 Hz (Selectable for each sub-CH)

\*1: Under standard operating conditions (temperature of 23°C  $\pm$  5°C, 20 to 80% RH, warm-up of 30 minutes or more), after calibration. Recommended calibration period: 1 year.