TRION-x-dLV-CB16-D9

DEWETRON

EXPANSION BOX FOR TRION-1802-dLV-32 and TRION-1600-dLV-32 BOARDS

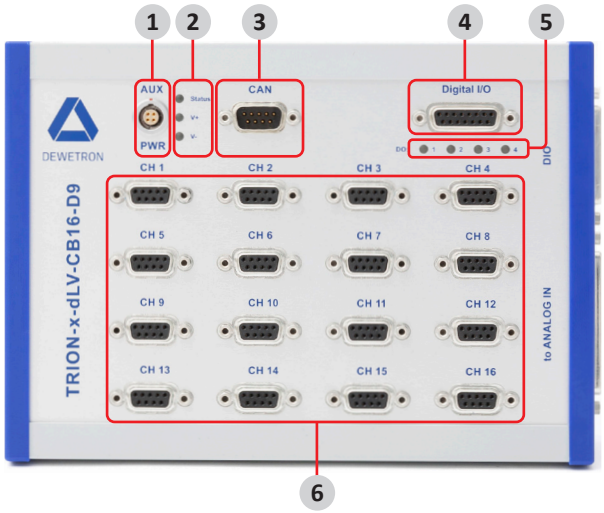
GENERAL

- 16 channel sensor connection box
- Precision ±5 V excitation voltage with remote sense per channel
- MSI support (Modular Smart Interface)
- Auxiliary sensor supply

MODULE SPECIFICATIONS

TRION-x-dLV-CB16-D9 specifications	
Sensor excitation	
– Voltage	±5V ±0.2%; balance around GND; remote sense support
– Maximum current	40 mA per channel
– Protection	Continuous short to ground; short circuit limit is 70 mA
Auxiliary sensor supply	Depending on external power supply; maximal 4 A
– Protection	– Self-resetting fuse; 4 A fuse for each of the 4 channels
Input connectors	
– Analog inputs	16x 9-pin female D-SUB
– CAN input	1x 9-pin male D-SUB
– Digital I/O	1x 15-pin male D-SUB
TEDS interface	Support TEDS chips; cable length up to 100 m
Dimensions (W x H x D)	220 x 154 x 46.5 mm

CONNECTIONS AND PORTS



1. AUX power input connector (4-pin LEMO EGG.1B.304)
2. LEDs
   - Status indicator: Application software (not) connected
   - V+, V-: ±5 V supply (not) OK
3. CAN interface connector (9-pin D-SUB connector male)
4. Digital I/O connector (15-pin D-SUB connector female)
5. LED for digital output: Output high/low
6. Sensor connection CH1 to CH16 (9-pin D-SUB connector female)

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CONNECTION WITH MSIS

General MSI functionality

Each MSI is a signal conditioner designed for a dedicated sensor type. By reading the TEDS chip, the measuring system gets any information necessary to adjust the amplifier accordingly. This means that the user is automatically shown the correct measuring ranges with the correct unit.

For traceability, important data, such as serial number or calibration date, are also read out and if necessary additionally stored with the measurement data file.

Supported MSIs

Modular smart interfaces		Input	Sensor excitation	Bandwidth[1)]	Accuracy	Sensor connection
MSI2-STG		Bridge-type sensors: full-bridge, half-bridge, quarter bridge 120 Ω and 350 Ω	5 V and 10 V	60 kHz	±0.1 %	Miniature spring terminals
MSI2-LVDT		LVDT and RVDT sensors, 5- or 6-wire connection	3 V at 2.5, 5 or 18 kHz	1 kHz	±0.1 %	Soldering pads
MSI-BR-ACC		IEPE® sensors, typ. accelerometer, microphone	4 mA	1.4 Hz to 70 kHz	±0.2 %	BNC
MSI2-CH-x		Charge type sensors up to 100 000 pC	n/a	0.08 Hz to 70 kHz	±0.5 %	BNC
MSI2-TH-x		Thermocouple sensors Standard models for type K, J, T, others on request	n/a	DC to 70 kHz	±1 °C	Mini TC socket
MSI-BR-V-200		Voltage up to 70 VDC, 46.7 V_{PEAK}	n/a	DC to 60 kHz	±0.1 %	BNC
MSI2-V-600		Voltage up to 600 VDC	n/a	DC to 60 kHz	±0.1 %	Banana sockets
MSI-BR-RTD		RTD sensors, Pt100, Pt200, Pt500, PT1000, Pt2000; 2, 3 and 4 wire connection	1.25 mA	DC to 10 kHz	±0.1 %	Binder 712 series 5-pin socket
MSI2-250R-20mA		4 to 20 mA sensors	n/a	DC to 70 kHz	±0.1 %	Miniature spring terminals

1) ***INFORMATION*** Max. value; consider limit of the used TRION module