

Features

- Scans 16 electrical channels
- $\pm 20\text{mV}$ up to 5Vdc inputs
- Scans electrical signals at 625Hz/channel/sec.
- Compatible with all DSA and ZOC components and systems



*DSA16EIM
Electrical Input Module*

General Description

The DSA16EIM is designed to multiplex, amplify, and filter up to 16 differential analog inputs. The channels are selected by a 4 bit binary CMOS level address and can be multiplexed up to 625Hz/channel/sec.

This unit is dimensionally the same as the DSA3016 pressure scanning module and it mounts in a standard 19 inch DSAENCL4000 enclosure. Sixteen input connectors are included with each DSA16EIM. These connectors are four pin solder type connectors, that accept 28 gauge or smaller wire. It accepts input signals from signal conditioned thermocouples, RTD, strain gauges, and from individual transducers for pressure, rpm, etc.

The DSA16EIM contains two user adjustments; amplifier gain and amplifier zero.

Amplifier zero may be trimmed by adjusting a R16 resistor that is accessible by removing the side panel.

Amplifier gain may be switched to one of 3 pre-programmed gains (1, 10, and 100) or a user specified gain.

Applications

The DSA16EIM is designed to be used in conjunction with our DSAENCL4000 pressure measurement system. It is also compatible with our ZOCENCL2000 enclosure. The DSA16EIM may be mixed with other DSA3016 pressure scanning modules within one system.

Optional Features

An additional circuit may be factory installed to provide an excitation voltage for strain gauges, RTDs, or pressure transducers. This circuit will provide +5Vdc at 50 mA. Other excitation voltages are available. The user may specify non-standard gains, special input filtering, or 4-20 mA inputs.

Specifications

Inputs (Px): 16

Input Signals: ±20mV up to ±5Vdc differential (specify max. input at time of order)

Channel Addressing: 4 bit binary, CMOS level

Full Scale Output: Maximum ± 3.5Vdc

Scan Rate: 625Hz/channel/sec.

Operating Temperature: 0° to 70°C

Gain Setting: Gain is normally set at 1.0 unless specified otherwise. (Selectable 1, 10, 100)

Repeatability: ±.05% FS

Linearity and Hysteresis: ±.05% FS

Optional

Excitation Circuit: Standard 5Vdc @ 50mA

ESD* Resistance: 4000 volts

Power Requirements: +15Vdc @ 100mA
- 15Vdc @ 50mA

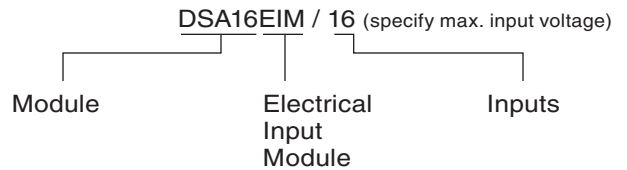
Over Voltage: 70 volts peak to peak

Module Connector: Card Edge 22/44pin

Signal Input Connectors Supplied: Lemo FGG.OB.304.CNAD42 (16 EA.)

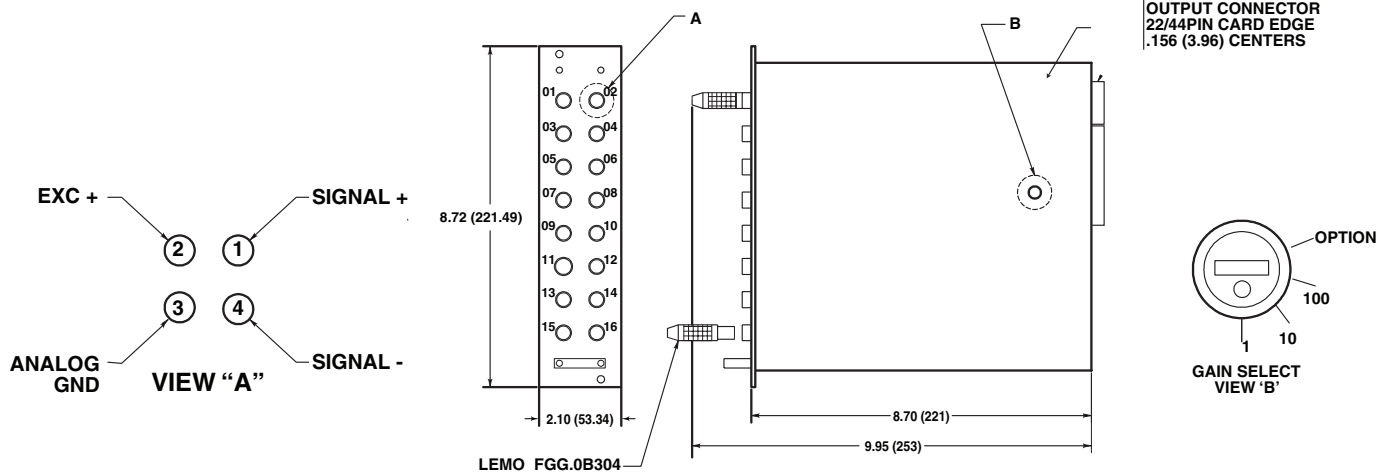
Weight: 2 lb. 1 oz. (930 gm)

Ordering Information



*ESD Electrostatic Discharge

Dimensions Inches (mm)



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