

Model ZOCEIM

Electrical Input Module

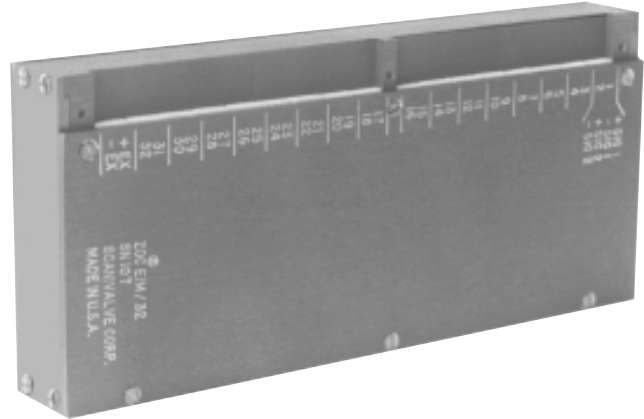
Scanivalve Corp.



Data Sheet No. G466

Features

- Scans 16 or 32 electrical channels
- Scans electrical signals at 20kHz
- Compatible with all ZOC and DSM3000 series components and systems



*ZOCEIM
Electrical Input Module*

General Description

The ZOCEIM is designed to multiplex and amplify up to 16 or 32 differential analog inputs. The analog input signals go directly to the 4 eight channel multiplexers. The outputs from these multiplexers are bussed together and then fed directly into an instrument amplifier. The amplifier selectable gain in factory set at 1, 10, 100, or 1000 but can be user set in the field. The multiplexed signal is selected by a 4 or 5 bit binary CMOS level address. The ZOCEIM can be multiplexed up to 20kHz and is available in 2 versions: 16 channel or 32 channel cable serviced units.

The ZOCEIM is similar to our cable serviced ZOC pressure scanners, in that it utilizes the same 15 pin electrical connector. It accepts input signals from signal conditioned thermocouples, RTD, strain gages, or individual transducers for pressure, rpm, etc. It may be mixed with other ZOC pressure scanning modules within a system.

Application

The ZOCEIM is designed to be used in the confined space in wind tunnel models. It is small in size and comes with a mounting bracket that makes it easy to install.

The ZOCEIM is designed to be used in conjunction with our Ethernet based DSM3000 series data system. Some customers choose to use their "in-house" data system instead of Scanivalve's data acquisition system. To help these users, Scanivalve manufactures a Module Address Control Unit (MACU2) which generates the address signals for their "in-house" data system.

Optional Features

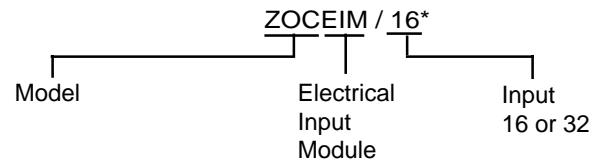
An additional circuit may be factory installed to provide an excitation voltage for strain gages, RTD's, or pressure transducers. This circuit will provide a stable +5 Vdc at 50mA. Optional excitation voltages of 7 and 10 volts are available on special order. The user may also specify non-standard gains.

Specifications

Inputs:	16 or 32
Input Signals:	$\pm 20\text{mV}$ up to $\pm 10\text{Vdc}$ differential
Output Signal:	Nominal $\pm 2.5\text{Vdc}$ Maximum $\pm 10\text{Vdc}$
Channel Addressing:	4 or 5 bit binary, CMOS level
Scan Rate:	20kHz
Operating Temperature:	0° to 70°C
Maximum Storage Temperature:	85°C
Gain Settings:	Specified at time of order* 1 $\pm 0.03\%$ 5 ppm/ $^\circ\text{C}$ 10 $\pm 0.15\%$ 10 ppm/ $^\circ\text{C}$ 100 $\pm 0.35\%$ 25 ppm/ $^\circ\text{C}$ 1000 $\pm 1.00\%$ 50 ppm/ $^\circ\text{C}$
Resolution:	.005% FS
Non-Linearity:	.003% FS
Input Offset Voltage:	$50\mu\text{V}$ referred to input

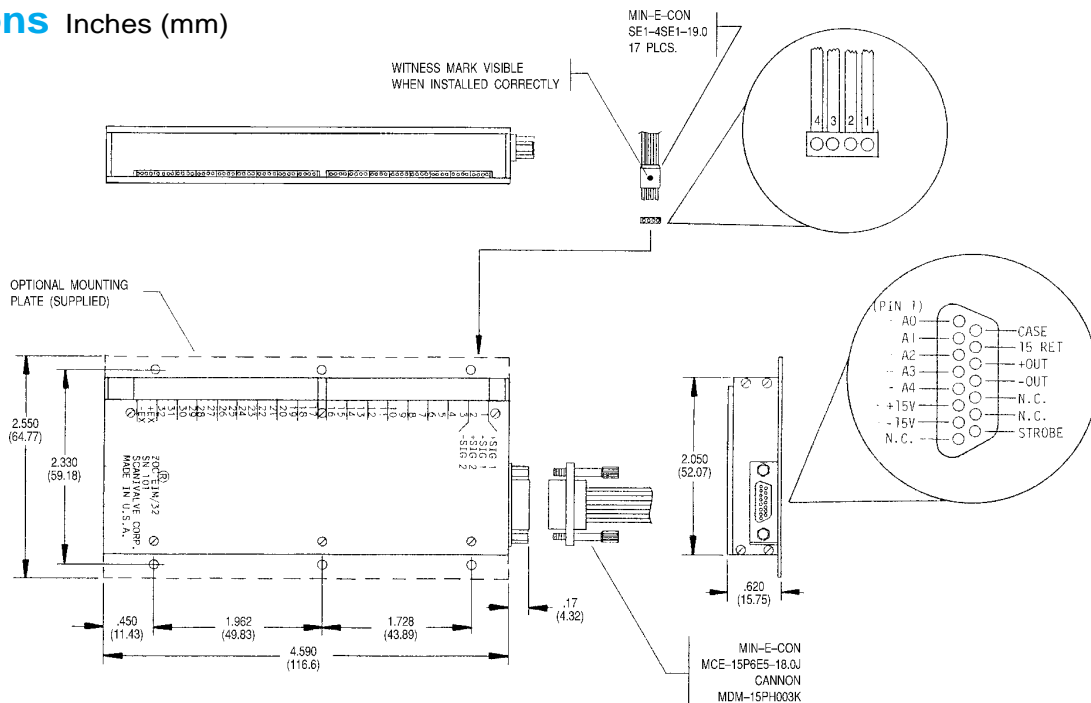
Excitation Circuit:	Standard $+5\text{Vdc}$ @ 50mA Max. (Ground Referenced) Optional 7Vdc , 10Vdc
Power Requirements:	$+15\text{Vdc}$ @ 100mA -15Vdc @ 50mA
Common Mode Rejection:	$\pm 10\text{Vdc}$ greater than 100dB
Over Voltage:	30 volts peak to peak
Module Connector:	Cannon 15 pin MDM 15SL2P
Weight:	ZOCEIM: 4.5 ozs. (128gm)

Ordering Information



*Specify gain on ZOCEIM at time of order.

Dimensions Inches (mm)



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