# **IEM Amplifiers**



High Performance Amplifier
50kMz Bandwidth
10 to 1000 Adjustable Gain Range
Reverse Polarity Protection

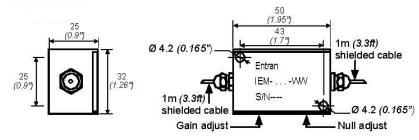


## The compact IEM Amplifiers

provide adjustable 10 to 1000 gain over a 50kHz bandwidth. Each Unit features 0.1% non-linearity error and reverse polarity and surge protection. Depending on options, sensor supply voltage can be 5 VDC, 10 VDC or 15 VDC. Common mode rejection is 120dB. Mating connectors are available for connector options and factory-wiring to the sensor is available upon request.

# dimensions

### -WW Model



### **FEATURES**

- Compact size
- Rugged construction
- Attractive packaging
- Surge protection
- Optional wiring configuration
- Wide operating temperature

### -22 Model



# wiring

### 

# + SENSOR SUPPLY - SENSOR SUPPLY + OUTPUT - OUTPUT - OUTPUT - OUTPUT - SHIELD - SHIELD - POWER - OUT - OUTPUT - SHIELD - SHIELD

### **APPLICATIONS**

- Instrumentation Labs
- Test Stands
- Process Monitoring
- In-line Amplifiers

EM Amplifier Rev

www.meas-spec.com

10/01/2008



# Supply for Sensors, General Characteristics, Options & Accessories

SENSOR SUPPLY VOLTAGE: 05 = 5V for Power type 12U

05 = 5V or 10 = 10V or 15 = 15V for Power type 15

SENSOR SUPPLY CURRENT max.: 20mA COMMON MODE REJECTION: 120dB

 CE CONFORMANCE:
 EN61010-1, EN 50081-1, EN 50082-1

 OPERATING TEMPERATURE:
  $-20 \degree \text{C}$  to  $70 \degree \text{C}$  (-4  $\degree \text{F}$  to  $158 \degree \text{F}$ )

 STORAGE TEMPERATURE:
  $-55 \degree \text{C}$  to  $125 \degree \text{C}$  (-67  $\degree \text{F}$  to  $257 \degree \text{F}$ )

WIRING: WW = Shielded cable input and output

SPECIAL CABLE LENGTH ON TYPE WW ONLY:

22 = Binder cylindrical connector (input/output) with unwired mate

L00F = Replace "00" with total length in feet.

L00M = Replace "00" with total length in meters.

CONNECTOR WIRED TO OUTPUT CABLE TYPE WW: C = Microtech type male or equivalent (w/o mate)

WIRE AMPLIFIER INPUT TO A SENSOR:

RS = RJ Telephone type male (w/o mate)
WI = Wire to sensor

MATING CONNECTORS FOR CONNECTOR OPTIONS: See Cable and Connector Bulletins

# **Amplifier Performance**

GAIN (G): 10 to 1000 adjustable

BANDWIDTH (-3dB) nom.: 50KHz

POWER REQUIRED:15 =  $\pm 15$ VDC12U = 8 to 28VDC Unreg.INPUT CURRENT WITHOUT SENSOR:10mA for Power type 1540mA for Power type 12UOUTPUT SIGNAL max.: $\pm 13$ V for Power type 15 $\pm 5$ V for Power type 12U

OUTPUT CURRENT max.: 5mA

BASE LINE (NULL) ADJUSTABILITY: ±5V for Power type 15 ±2.5V for Power type 12U

 $\begin{array}{lll} \textbf{NON-LINEARITY max.:} & 0.1\% \\ \textbf{INPUT IMPEDANCE nom.:} & 10M\Omega \\ \textbf{OUTPUT IMPEDANCE nom.:} & 100\Omega \\ \end{array}$ 

INPUT PROTECTION: Reverse Polarity and Surge Protected (600V, 10µs & 60V, 0.1s)

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### Model number construction

(IN/OUT) Series Power Sensor Supply Gain Required Voltage **IEM** 05 10 15 Cable or Connector 15 1000R C or RS 12 U WW L00F or L00M 05 05 10 15 22 WI

Example: IEM-15/05/1000R-WW

Model IEM, ±15VDC power, 5V Sensor Supply, 1000 Gain, Cable Input and Output

IEM Amplifier Rev 1 www.meas-spec.com 10/01/2008