

MODEL 160 IEPE POWER SUPPLY

- Single Channel IEPE Power Supply
- x1 and x10 Selectable Gain
- Small Rugged Package
- Simple and User Friendly

The Model 160 is a small and portable single channel IEPE power supply for piezo-electric sensors. The power supply features a 4mA constant current excitation with a selectable x1 and x10 gain switch. The low noise model 160 power supply is ideal for laboratory testing and has a wide bandwidth from 1-20kHz. An LED status indicator is included which will notify operator of normal, open or short circuit.

FEATURES

- Interface with IEPE Sensors
- ± 10 Volts Linear Output
- x1 and x10 Gain Settings
- Wide Bandwidth to 20kHz
- 4 mA Current Excitation
- Status LED Indicator
- BNC Input and Output Connectors

APPLICATIONS

- Piezo-electric Sensor Excitation
- Laboratory Shock and Vibration Testing
- Instrumentation Labs
- Testing of IEPE Accelerometer, Force and Pressure Sensors

PERFORMANCE SPECIFICATIONS

All values are typical at $\pm 24^{\circ}\text{C}$ and 4mA constant current excitation unless otherwise stated. TE reserves the right to update and change these specifications without notice.

PARAMETERS

DYNAMIC

| | |
|-------------------------------|--|
| Input Type | Single-ended, constant current two-wire system |
| Output Type | Single-ended, one side connected to circuit ground |
| User Selectable Gain Settings | x1, x10 |
| Bandwidth ($\pm 5\%$) | 1 to 20kHz |
| Noise (Vrms) | 45^{-6} RTI or 0.0001 RTO |
| Amplitude Linearity (%) | 1.0 |

ELECTRICAL

| | |
|---------------------------------|-------------------------|
| Power Supply | 12 Vdc at 50 mA typical |
| Excitation Current (mA) | 4 |
| Compliance Voltage (Vdc) | 24 |
| Linear Output Voltage (p-p) | 10 Volts |
| Gain Accuracy (%) | 1.5 |
| Input Impedance (k Ω) | >20 |
| Output Impedance (Ω) | <10 |
| Total Harmonic Distortion (%FS) | <1 |

ENVIRONMENTAL

| | |
|--|------------------------------------|
| Operating Temperature ($^{\circ}\text{C}$) | 0 to +85 |
| Storage Temperature ($^{\circ}\text{C}$) | 0 to +85 |
| Environmental Protection | IP50, Silicone Potted |
| Vibration (g) | 20 pk from 50Hz to 2000Hz |
| Shock (g) | 2000 pk with 3.6ms Haversine pulse |

PHYSICAL

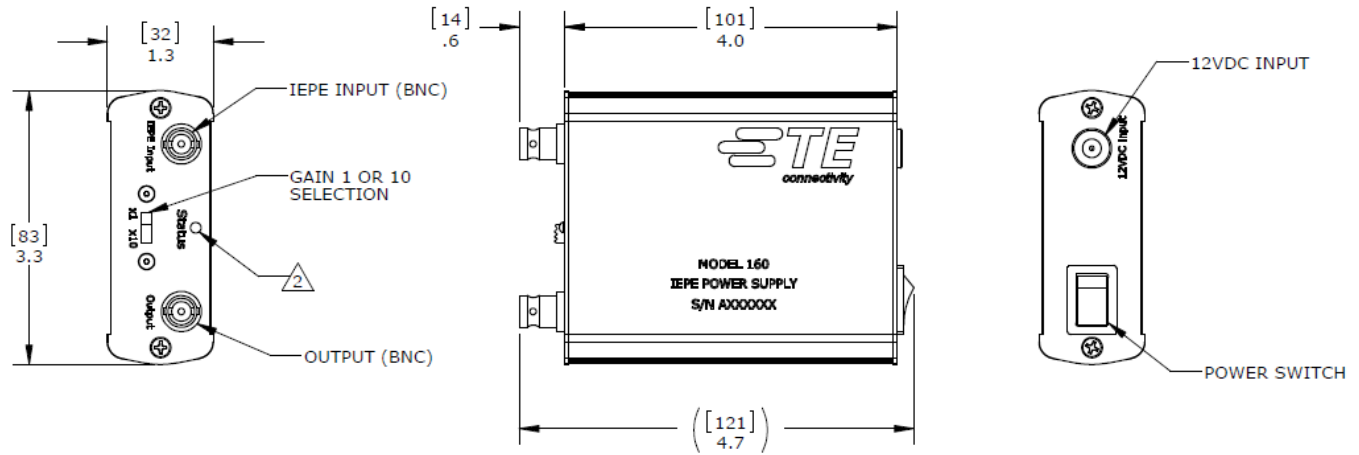
| | |
|------------------------------|-------------------|
| Case Material | Anodized Aluminum |
| Electrical Connector, Input | BNC Connector |
| Electrical Connector, Output | BNC Connector |
| Weight (grams) | 164 |

SUPPLIED ACCESSORIES

90 to 264 Vac to 12 Vdc Power Supply Adaptor

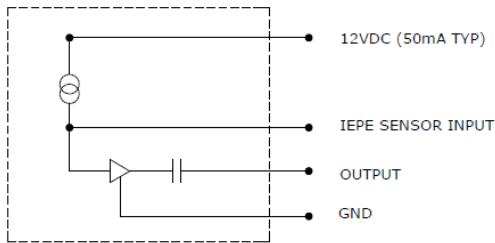
**MODEL 160
IEPE POWER SUPPLY**

DIMENSIONS



SCHEMATIC

SINGLE CHANNEL IEPE POWER SUPPLY



ORDERING INFORMATION

Part Number

160

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