

# **POWER SUPPLIES**



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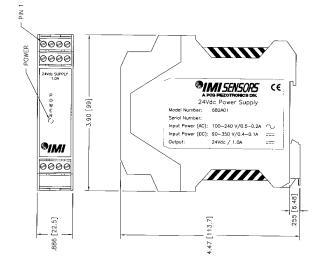
### **24 VDC POWER SUPPLY**



- Universal AC or DC power supply
- Three pairs of +/- terminals for output wiring.
- Local LED indicator (green) and dedicated terminals for wiring of remote LED indicator for power.

#### **MODEL 682A01**

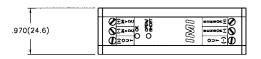
SPECIFICATIONS		
Model Number	682A01	
Environmental		
Vibration (10Hz-150Hz)	2g 19.6 m/s²	
Shock (3 directions for 18 ms)	30g 294.2 m/s <sup>2</sup>	
Temperature Range (Operating)	-13 to +158 °F -25 to +70 °C	
Temperature Range (Storage)	-40 to +185 °F -40 to +85 °C	
Humidity Range (Non-Condensing)	<95 %	
Electrical		
Power Required	85-264 VAC / 90-350 VDC	
Output Voltage	24 VDC	
Output Current	1.3 Amps	
Input Frequency	45 to 65 Hz	
Inrush Current (@ 25 deg C)	<15A	
Current Consumption (230/120 VAC)	0.3/0.5A	
Fuse	1.25A/250V	
Mains Buffering	>20/110ms (120/230 VAC)	
Surge Voltage Protection	Varistor	
10-90% Load Tolerance	+/- 3%	
Turn On Delay	<0.5/1s (230/120 VAC)	
Turn Off Delay	<150ms	
Internal Surge Voltage Protection	35 VDC +/- 5%	
Parallel Switching	Redundant Systems Only	
Ripple Voltage	<20mV pp	
Maximum Power Loss	0.9/4.5W (No Load/Load)	
DC OK (Active)	24V / 20mA	
Insulation Voltage	3kV	
Physical		
Housing Material	Polyamide	
Status Indicator "Power"	Green LED	
Electrical Connector	Screw Terminals	
Screw Terminal Wire Size	24-14 AWG	
DIN Rail Mount	1.38 in 35 mm	
Weight	7.1 oz 201.3 g	

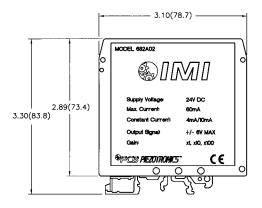


## **ICP® SIGNAL CONDITIONER**



- Provides ICP® power to sensor with selectable fixed constant current (4 or 10 mA)
- Decouples DC bias voltage from the AC signal
- Gains signal (1x, 10x or 100x)





#### **MODEL 682A02**

SPECIFICATIONS		
Model Number	682A02	
Performance		
Channels	1	
Voltage Gain	1/10/100	
Frequency Range (±1 dB)	1 to 100,000 Hz	
Broadband Electrical Noise (x1 Gain, 1 to 10 kHz)	50 μV	
Broadband Electrical Noise (x10 Gain,1 to 10 kHz)	400 µV	
Broadband Electrical Noise (x100 Gain,1 to 10 kHz)	3.5 mV	
Environmental		
Temperature Range (Operating)	+32 to +158 °F 0 to +70 °C	
Electrical	1	
DC Power	21.6-26.4 VDC	
DC Power	≤60 mA	
Fuse	1A	
Excitation Voltage (Delivered to Sensor)	18 VDC	
Constant Current Excitation (Delivered to Sensor)	4 mA or 10 mA	
Spectral Noise (x1 Gain, 10 Hz)	0.8 µV/√Hz	
Spectral Noise (x1 Gain, 100 Hz)	0.5 µV/√Hz	
Spectral Noise (x1 Gain, 1 kHz)	0.5 µV/√Hz	
Spectral Noise (x1 Gain, 10 kHz)	0.6 µV/√Hz	
Spectral Noise (x10 Gain, 10 Hz)	7.5 μV/√Hz	
Spectral Noise (x10 Gain,100 Hz)	3.6 µV/√Hz	
Spectral Noise (x10 Gain,1 kHz)	3.2 μV/√Hz	
Spectral Noise (x10 Gain, 10 kHz)	6.0 μV/√Hz	
Spectral Noise (x100 Gain,10 Hz)	80 µV/√Hz	
Spectral Noise (x100 Gain,100 Hz)	40 µV/√Hz	
Spectral Noise (x100 Gain,1 kHz)	32 µV/√Hz	
Spectral Noise (x100 Gain,10 kHz)	50 µV/√Hz	
Physical		
Housing Material	Polyamide	
Status Indiator "Open/Short"	Green LED	
Electrical Connector	Screw Terminals	
Screw Terminal Wire Size	24-14 AWG	
DIN Rail Mount	1.38 in 35 mm	
Weight	3.1 oz 87.9 g	



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IMI SENSORS

A PCB DIVISION

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IMI Sensors offers a wide range of industrial vibration sensors, bearing fault detectors, mechanical vibration switches, panel meters, cables, and accessories for predictive maintenance and equipment protection. For power generation and energy applications requiring precision measurements, IMI also offers pressure sensors and accelerometers.

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