



Four-channel Multi-purpose Signal Conditioner

For Differential/Single-ended MEMS, Bridge, & ICP® Sensors

Highlights

- Compatible with Full, ½, & ¼ Bridge Sensors
- Provides Sensor Excitation Voltage or ICP® Power
- Also Suitable for Conditioning Any Voltage Input Signals
- Gain of 0.1 to 2000 for Bridge Inputs
- Gain of 0.1 to 200 for ICP®/Voltage Inputs
- Auto Zero and Auto Balance Functions
- AC/DC Coupling
- Digital Data Output
- Keypad, RS-232, and Ethernet Control
- Menu-driven Dot Matrix Display
- Control Software Included



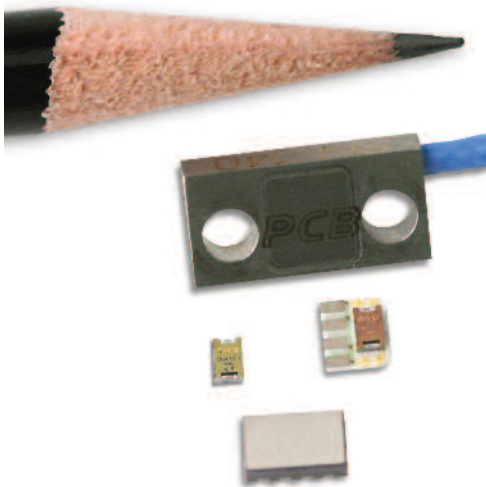
The model 482C27 four-channel, benchtop signal conditioner is full featured and cost effective. It offers low noise operation and simplicity of use. Each channel is selectable between two input types: Bridge/MEMS or ICP®/Voltage.

For the bridge inputs, this model offers 0 to 12 VDC unipolar or bipolar excitation voltage for use with differential/single-ended MEMS and bridge sensors like load cells and reaction torque sensors. This mode features incremental gain of x0.1 to x2000, auto zero, auto balance, AC/DC coupling, normalization, and shunt calibration. The bridge inputs are compatible with full bridge sensors as well as ½ and ¼ bridge sensors with internal switchable bridge completion resistors.

For the ICP® inputs, the model offers 0 to 20 mA of constant current excitation to power ICP sensors or in-line ICP® charge converters. This mode features incremental gain of x0.1 to x200, normalization, and AC/DC coupling.

The base unit of this model is powered from 9 to 18 VDC, however, it is supplied with a universal voltage, AC power adapter. Optional auto lighter adapter, model 488A13, is also available.

As with all PCB® instrumentation, this model is complemented with toll-free application assistance, 24-hour customer service, and is backed by a no-risk policy that guarantees satisfaction or your money refunded.



Samples of Compatible MEMS Sensors

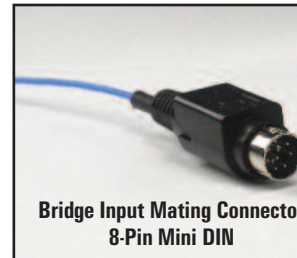


Bridge/Differential/ICP®/Voltage Sensor Signal Conditioner

Model Number	482C27
Channels	4
Sensor Input Types	Differential MEMS/Bridge, ICP®/Voltage
Compatible Sensor Series	350x, 360x, 371x, 374x, 3991, load cells
Gain	x0.1 to x2000; x0.1 to x200 [1]
Gain Increment	0.1
Output Range	±10 V
Frequency Response	DC to 100 kHz (-3dB)
Temperature Range (Operating)	+32 to +122 °F 0 to +50 °C
Excitation Voltage	0 to 12 VDC unipolar or bipolar [2]
Computer Control	Ethernet/RS-232
Power Required	9 to 18 VDC [3]
Input Connectors	(4) 8-socket mini DIN, (4) BNC jacks
Output Connectors	BNC jacks
Size (Height x Width x Depth)	3.2 in x 8.0 in x 5.9 in 8.1 cm x 20 cm x 15 cm
Weight	2.25 lb 1.021 kg
Supplied Accessories	
(1) 017AXX Power Cord; (1) 488A14 Universal Power Adapter; (1) MCSC Control Software	
Additional Accessories	
Auto Lighter Adapter	488A13
Input Mating Connector(s)	8-pin mini DIN, AC
Additional Versions	
8-channel 19" rack mount version, computer control only	483C28
Notes	
[1] Maximum gain for bridge/MEMS input is x2000 and for ICP®/voltage input is x200. [2] In bipolar mode, +Vexc and -Vexc track each other. They are equal and opposite. [3] Supplied with 85 to 264 VAC, 47 to 400 Hz Universal Power Adapter.	



**Rear Panel
Series 482C27
Signal Conditioner**



**Bridge Input Mating Connector
8-Pin Mini DIN**

Pin	Description
1	Signal -
2	Signal +
3	Sense -
4	R Shunt
5	Vexc +
6	Vexc -
7	Signal Gnd
8	Sense +



**483C28
8-channel version, computer control only**



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AS9100 CERTIFIED ■ ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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PCB® Piezotronics Test & Measurement Electronics product offering includes signal conditioners and cabling for ICP® and charge output piezoelectric, MEMS-based, and full-bridge strain gage sensors. Battery-powered and line-powered signal conditioners are available, with a wide range of options, including gain, filtering, TEDS and integration functions. Stock cables for quick delivery and custom cables to meet any connection requirement are also available. Additional Test & Measurement products include sensors for acoustics, force, load, strain, torque, pressure, acceleration, shock, and vibration. PCB® products are backed by our **Total Customer Satisfaction** policy, which guarantees your satisfaction or your money refunded.

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