

USB POWERED - DUAL CHANNEL ICP[®] SENSOR SIGNAL CONDITIONER



Widen your data acquisition options by connecting your ICP[®] sensors to your PC sound card.

Model 485B36 is a pocket sized dual channel ICP sensor signal conditioner that requires no batteries for operation. The 485B36 is powered by the Universal Serial Bus (USB) port commonly found on both desktop and notebook computers. Now your PC sound card or other data acquisition device can record signals from a wide range of ICP accelerometers, microphones, force sensors, tachometers (using LaserTach[™] or PulseDriver[™]) and dynamic strain gauges.

Connect ICP sensors to the 485B36 using standard BNC jacks. The 485B36 conditions the input signals and outputs the low impedance voltage signals on an 1/8" (3.5mm) stereo jack. The 485B36 includes the 009M130 cable for direct connection to a PC sound card and the 009M131 cable to adapt the 485B36 for input to BNC connectors on other data acquisition devices.

BENEFITS:

- Achieves low noise performance of battery powered signal conditioners without the hassle of replacing batteries.
- Utilizes power supplied through PC USB port.
- Supports all existing ICP sensors.
- Compact package is ideal for "road warriors" who need quick data samples without transporting an FFT analyzer.

**PERFORMANCE**

Signal Gain ($\pm 0.5\%$)	V/V	x1
Frequency Response ($\pm 2\%$ Amplitude)	Hz	2 to 50k
Frequency Response ($\pm 5\%$ Amplitude)	Hz	1 to 50k
Frequency Response ($\pm 5^\circ$ Phase)	Hz	5 to 50k
Frequency Response ($\pm 10^\circ$ Phase)	Hz	1 to 50k
Broadband Noise (1 to 10kHz)	μ Vrms	12
Typical Spectral Noise (1 Hz)	nVrms/Hz	150
(10 Hz)		50
(100 Hz)		35
(100 Hz)		270
(10 kHz)		210
Linearity	%	± 1
THD @ 100 Hz (FS Input Signal)	%	0.75
Sensor Excitation Voltage (± 1.0)	VDC	19.5
Constant Current Sensor Excitation (± 1.0)	mA	4.8
Crosstalk	dB	< -92

ENVIRONMENTAL

Operating Temperature Range	$^\circ$ F ($^\circ$ C)	32 to 122 (0 to 50)
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ELECTRICAL

Maximum DC Offset at Output	mVDC	80
Output Impedence Parallel	MOhms	1.1
Series	μ F	2.2
Power Consumption (at 5VDC)	mA	69

MECHANICAL

Input Connectors	Type	BNC Jack
Output Connector	Type	1/8" (3.5mm) Stereo Jack
Size (H x W x D)	inches (mm)	1.18 x 3.67 x 1.33 (29,8 x 93,2 x 33,8)
Mass	oz (grams)	2.5 (70)
Power Cable Connector	Type	Universal Serial Bus
Power Cable Length	inches (m)	76 (1,93)

INCLUDED ACCESSORIES

009M130	1/8" (3.5mm) stereo plug to 1/8" (3.5mm) stereo plug, 1 ft.
009M131	1/8" (3.5mm) stereo plug to (2) RCA / BNC plugs, 3 ft. (includes (2) phono to BNC adaptors)

OTHER TMS PRODUCTS FOR STRUCTURAL TEST APPLICATIONS

- **Large Channel Signal Conditioning:** 440 Series offers a flexible, compact solution for acceleration, sound pressure, and force sensor signal conditioning. When using tens, hundreds or more channels of sensors, the modular architecture allows great flexibility and scalability for users to add or change testing capabilities in the future.
- **ICP[®] Tachometer:** Eliminate special signal conditioning - the LaserTach[™] powers from ICP just like an accelerometer.
- **ICP[®] Conditioning for Magnetic Tachometers:** The PulseDriver[™] allows a traditional magnetic rotational speed pickup to be used with a ICP data acquisition channel.
- **TEDS Sensor / Computer Interface Kit:** The 400A76 offers single mouse click read and write of TEDS data using your Windows PC. Model 400A76 supports more TEDS templates than any other available TEDS sensor interface kit.

The Modal Shop 3149 E Kemper Road, Cincinnati, OH 45241
Toll free 800-860-4867 / Phone 513-351-9919 / Fax 513-458-2172
E-mail info@modalshop.com Web site www.modalshop.com

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