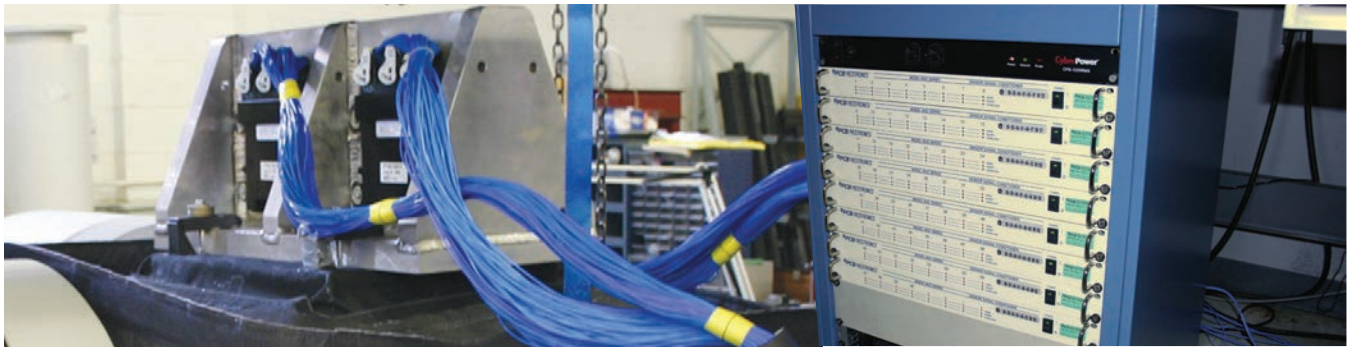
PCB PIEZOTRONICS
MTS SYSTEMS CORPORATION



SERIES **482C & 483C**

4 & 8-CHANNEL MULTI-PURPOSE SIGNAL CONDITIONERS

FOR ICP®, CHARGE OUTPUT, AND BRIDGE/DIFFERENTIAL SENSORS

- Provides sensor excitation: current or voltage
- All models power ICP® sensors and in-line ICP® charge converters
- Models directly compatible with charge output piezoelectric sensors
- Models directly compatible with bridge/ differential sensors
- Models suitable for conditioning any voltage input signal
- Models with TEDS sensor support (IEEE 1451.4 & IEEE P1451.4)

CE TEDS CIRCUITRY COMPATIBLE

The 482C series are 4-channel benchtop signal conditioners that range from units with simple stand-alone operation to more complex units with front panel keypad / display, RS-232, or Ethernet control. The 483C series are 8-channel 19" rack-mounted units that are based on the same signal conditioning electronics. They also range from units with simple stand-alone operation to more complex units with front panel keypad / display and Ethernet control.

Both series offer units with a wide range of features including incremental gain, AC/DC coupling, auto zero, auto balance, and constant current or DC voltage supplies. Models with computer interfaces are supplied with PCB's Multi-Channel Signal Conditioner control software for signal conditioner setup and control.

The 482C series models are DC powered, however, they are supplied with a universal voltage, AC power adapter. The 483C series models are all AC powered only.

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

SPECIFICATIONS

SPECIFICATIONS							
Model	**482C05**	**482C15**	**482C16**	**482C24**	**482C27**	**482C54**	**482C64**
Performance							
Input Sensor Type	ICP®	ICP®, Voltage			ICP®, Voltage, Bridge/ Differential	ICP®, Charge, Voltage	
Gain	—	x1, x10, x100 [1]	x0.1 to x200		x0.1 to x200 (ICP®, Volt) x0.1 to x2000 (Brdg/Diff)	x0.1 to x200	
Charge Conversion (selectable)	—					0.1, 1, 10 mV/pC	
Frequency Range (+/-5%) (gain <100)	0.1 Hz to 1000 kHz	0.05 Hz to 17 kHz	0.05 Hz to 100 kHz	0.05 Hz to 100 kHz [8]		0.05 Hz to 100 kHz [2]	
Frequency Range (+/-5%) (gain ≥100)	—	0.05 Hz to 17 kHz	0.05 Hz to 50 kHz	0.05 Hz to 50 kHz [8]		0.05 Hz to 75 kHz [2]	
Coupling (AC or DC)	AC			AC/DC		AC	
Input Filter [3]	—	Optional			Optional Bridge & ICP® [9]	Optional	
Output Filter [3]	—		Optional			10 kHz LPF (4th order)	
TEDS Sensor Support	—		Yes				
Electrical							
AC Power (From power adapter) [4]	100 to 240 VAC						
AC Power (From power adapter) [4]	≤0.7 amps		≤1.6 amps			≤0.35 amps	
Excitation Voltage (To Bridge/Diff. Sensors)	—				-12 V to +12 V [6][7]	—	
Excitation Voltage (To ICP® Sensors)	+26 VDC		+24 VDC				
Constant Current Excitation (To ICP® Sensors) [5]	2 to 20 mA	0 to 20 mA					
DC Offset	<20 mV		<50 mV				
Broadband Electrical Noise (1 to 10000 Hz) (x1 gain)	3.5 µV rms	5.6 µV rms	50 µV rms				
Physical							
Front Panel Display/Keypad	—		Yes				
Digital Control Interface	—		RS-232		RS-232, Ethernet	RS-232	RS-232, Ethernet
Electrical Connector (Inputs)	BNC jack				BNC jack, 8-socket mini DIN	BNC jack	
Electrical Connector (Outputs)	BNC jack						
Electrical Connector (DC Power Input)	5-socket DIN		6-socket mini DIN				
Size (Height x Width x Depth) (Nominal)	3.2 x 8.0 x 5.9 in 8.1 x 20 x 15 cm						
Weight	1.25 lb 567 gm		2.00 lb 907 gm		2.50 lb 1134 gm	2.40 lb 1089 gm	2.50 lb 1134 gm
Supplied Accessories							
Power Cord	017AXX						
Universal Power Adapter	488B04/NC		488B14/NC				
Communication Cable	—		100-7103-50				
MCSC Control Software	—		EE75				
Additional Versions							
Power Button Disabled; On Whenever Powered	482M187	—	482M186	—			
Notes							

[1] Jumper selectable on internal circuit board. [2] Charge input low frequency response is 0.5 Hz (+/-20%). [3] Contact factory for available filter options.
[4] Units are supplied with applicable AC to DC converter for operation from 100 to 240 VAC (50 to 60 Hz). [5] User adjustable, factory set at 4 mA. [6] Adjustable in 0.1V steps.
[7] Negative excitation can be set to 0V or to track the positive excitation voltage. [8] 0 Hz low frequency response when DC coupled.
[9] Dual input filters: 1x ICP, Voltage & 1x Bridge/Differential.

SPECIFICATIONS

Model	483C05	483C15	483C28	483C30	483C40	483C41	483C50
Performance							
Input Sensor Type	ICP®	ICP®, Voltage	ICP®, Voltage, Bridge/Differential	ICP®, Voltage, Charge			ICP®, Voltage
Gain	—	x1, x10, x100 [1]	x0.1 to x200 (ICP®, Volt) x0.1 to x2000 (Brdg/Diff)	x0.1 to x200	x0.1 to x200 (ICP®, Volt) x0.01 to x2000 mV/pC (Charge)		x0.1 to x200
Charge Conversion (selectable)	—			0.1, 1, 10 mV/pC	—		
Frequency Range (±5%) (gain <100)	0.1 Hz to 1000 kHz	0.05 Hz to 17 kHz	0.05 Hz to 100 kHz [7]	0.05 Hz to 100 kHz (-3dB) [2]			
Frequency Range (±5%) (gain ≥100)	—	0.05 Hz to 17 kHz	0.05 Hz to 50 kHz [7]	0.05 Hz to 100 kHz (-3dB) [2]			0.05 Hz to 80 kHz (-3dB)
Coupling (AC or DC)	AC		AC/DC	AC			
Input Filter [3]	—	Optional	Optional - Bridge & ICP® [8]	Optional		Selectable LPF Included	Optional
Output Filter [3]	—	Optional	Optional	10 kHz LPF (4th order)	Optional		
TEDS Sensor Support	—		Yes				
Electrical							
AC Power (47 to 63 Hz)	100 to 240 VAC						
AC Power	≤0.7 amps		≤0.9 amps	≤0.85 amps	≤0.7 amps		
Excitation Voltage (To Bridge/Diff. Sensors)	—		-12 V to +12 V [5][6]	—			
Excitation Voltage (To ICP® Sensors)	+26 VDC		+24 VDC				
Constant Current Excitation (To ICP® Sensors) [4]	0 to 20 mA						
DC Offset	<20 mV		<50 mV				
Broadband Electrical Noise (1 to 10000 Hz) (x1 gain)	3.5 µV rms	5.6 µV rms	50 µV rms				
Oscillator(±2%) (Internal Generator - ICP®/ Voltage mode)	—			0.1 V pk 100/1000 Hz			—
Oscillator(±2%) (Internal Generator - Charge mode)	—			100 pC pk 100/1000 Hz			—
Physical							
Front Panel Display/ Keypad	—					Yes	—
Digital Control Interface	—		Ethernet				
Electrical Connector (Inputs)	BNC jack		BNC jack, 8-socket mini DIN	BNC jack			
Electrical Connector (Outputs)	BNC jack						
Electrical Connector (AC Power Input)	IEC 320						
Size (Height x Width x Depth) (Nominal)	1.75 x 19 x 13.5 in 4.5 x 48.3 x 34.3 cm						
Weight	6.25 lb 2.83 kg		7.0 lb 3.17 kg	8.0 lb 3.6 kg			7.0 lb 3.17 kg
Supplied Accessories							
Power Cord	017AXX						
MCSC Control Software	—		EE75				

Notes

[1] The high frequency tolerance is accurate within ±5% of the specified frequency. [2] The low frequency tolerance is accurate within ±25% of the specified frequency.
[3] Contact factory for available filter options. [4] User adjustable, factory set at 4 mA. [5] Adjustable in 0.1V steps. [6] Negative excitation can be set to 0V or to track the positive excitation voltage.
[7] 0 Hz low frequency response when DC coupled. [8] Dual input filters: 1x ICP, Voltage & 1x Bridge/Differential.

SERIES 482C 4-CHANNEL SIGNAL CONDITIONER

SERIES 483C 8-CHANNEL SIGNAL CONDITIONER

All models that have an RS-232 or Ethernet interface are supplied with PCB's Multi-Channel Signal Conditioner Control software. This easy to use software displays a table of the unit's current settings versus channels. Users can change any setting by simply changing values in the table. Typical settings include Input Sensor Type, Gain, Filtering, and Constant Current Excitation.

Software is available for download at:

www.pcb.com/MCSC-Software

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PCB Piezotronics, Inc. is a designer and manufacturer of microphones, vibration, pressure, force, torque, load, and strain sensors, as well as the pioneer of ICP® technology used by design engineers and predictive maintenance professionals worldwide for test, measurement, monitoring, and control requirements in automotive, aerospace, industrial, R&D, military, educational, commercial, OEM applications, and more. With a worldwide customer support team, 24-hour SensorLine℠, and a global distribution network, PCB® is committed to Total Customer Satisfaction. Visit www.pcb.com for more information. PCB Piezotronics, Inc. is a wholly owned subsidiary of MTS Systems Corporation. Additional information on MTS can be found at www.mts.com.

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MTS SENSORS

MTS Sensors, a division of MTS Systems Corporation (NASDAQ: MTSC), vastly expanded its range of products and solutions after MTS acquired PCB Piezotronics, Inc. in July, 2016. PCB Piezotronics, Inc. is a wholly owned subsidiary of MTS Systems Corp.; IMI Sensors and Larson Davis are divisions of PCB Piezotronics, Inc.; Accumetrics, Inc. and The Modal Shop, Inc. are subsidiaries of PCB Piezotronics, Inc.