



SERIES 482C & 483C

4 & 8-CHANNEL MULTI-PURPOSE SIGNAL CONDITIONERS

- 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)



 **PLATINUM STOCK SENSORS**
SAME DAY SHIPPING - LIFETIME WARRANTY



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

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	—			100-71103-50		
MCSC Control Software	—			EE75		
Additional Versions						
Power Button Disabled; On Whenever Powered	482M187	—	482M186	—		
Notes						
<p>[1] 내부 회로 기판에서 점퍼 선택 가능. [2] 충전 입력 저주파 응답은 0.5Hz(+/-20%)입니다. [3] 필터는 주문 전에 공장에서 설치 및 구성되어야 합니다. 사용 가능한 필터 옵션 및 부품 번호는 공장에 문의하십시오. [4] 본 장치는 100~240VAC(50~60Hz)에서 작동하기 위한 해당 AC-DC 변환기와 함께 제공됩니다. [5] 사용자 조정 가능, 공장 설정값은 4mA입니다. [6] 0.1V 단위로 조정 가능. [7] 음의 여자 전압은 0V로 설정하거나 양의 여자 전압을 추종하도록 설정할 수 있습니다. [8] DC 결합 시 저주파 응답은 0Hz입니다. [9] 이중 입력 필터: ICP(전압) 필터 1개 및 브리지/차동 필터 1개.</p>						

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			—	
Selectable Ground Isolation	—	—	—	Yes	—	—	—
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							
<p>[1] 고주파 허용 오차는 지정된 주파수의 ±5% 이내입니다. [2] 저주파 허용 오차는 지정된 주파수의 ±25% 이내입니다. [3] 필터는 주문 전에 공장에서 설치 및 구성해야 합니다. 사용 가능한 필터 옵션 및 부품 번호는 공장에 문의하십시오. [4] 사용자 조정 가능, 공장 설정값은 4mA입니다. [5] 0.1V 단위로 조정 가능합니다. [6] 음의 여기는 0V로 설정하거나 양의 여기 전압을 추적하도록 설정할 수 있습니다. [7] DC 결합 시 저주파 응답은 0Hz입니다. [8] 이중 입력 필터: 1x ICP, 전압 및 1x 브리지/차동.</p>							



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

