

Model Number  
**682A02**

# ICP® SIGNAL CONDITIONER

Revision: A  
ECN #: 15998

**ELECTRICAL CHARACTERISTICS**

Excitation Voltage ( $\pm 1$ VDC)	18 VDC	[1]
Excitation Current ( $\pm 1$ mA)	4/10 mA	[2]
Voltage Gain	1/10/100	[2]
Amplitude Linearity	$\leq 2\%$	
Frequency Response ( $\pm 1$ dB)	60 - 6,000,000 cpm	[3]
Noise, Gain 1:		
Broadband Electrical Noise (1-10 kHz)	50 $\mu$ V	[4]
Spectral Noise (@ 10 mA):		
10 Hz	0.8 $\mu$ V/√Hz	[4]
100 Hz	0.5 $\mu$ V/√Hz	[4]
1 kHz	0.5 $\mu$ V/√Hz	[4]
10 kHz	0.6 $\mu$ V/√Hz	[4]
Noise, Gain 10:		
Broadband Electrical Noise (1-10 kHz)	400 $\mu$ V	[4]
Spectral Noise (@ 10 mA):		
10 Hz	7.5 $\mu$ V/√Hz	[4]
100 Hz	3.6 $\mu$ V/√Hz	[4]
1 kHz	3.2 $\mu$ V/√Hz	[4]
10 kHz	6.0 $\mu$ V/√Hz	[4]
Noise, Gain 100:		
Broadband Electrical Noise (1-10 kHz)	3.5 mV	[4]
Spectral Noise (@ 10 mA):		
10 Hz	80 $\mu$ V/√Hz	[4]
100 Hz	40 $\mu$ V/√Hz	[4]
1 kHz	32 $\mu$ V/√Hz	[4]
10 kHz	50 $\mu$ V/√Hz	[4]

**OPTIONAL VERSIONS**

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

-None-

**POWER REQUIREMENTS**

Voltage ( $\pm 10\%$ )	24 VDC
Current (maximum)	60 mA
Fuse	1 A

**ENVIRONMENTAL CHARACTERISTICS**

Temperature Range  
32 to 158 °F

**PHYSICAL CHARACTERISTICS**

Size	3.1 x 3.3 x 0.97
Weight	0.194 lb
Mounting	Din Rail
Input/Output Connector	Terminal Strip

**NOTES:**

- [1] If unit is used in conjunction with a sensor having a bias over 13 VDC, full scale output may be affected or sensor may not power up.
- [2] Internally jumper selectable.
- [3] 1 Hz = 60 cpm (cycles per minute).
- [4] Typical value.

**SUPPLIED ACCESSORIES:**

None

All specifications are at room temperature unless otherwise specified.

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