

**ICP @ MODE**

Sensor Excitation Voltage  
Sensor Excitation Current  
Sensitivity Adjustment  
Voltage Gain  
Accuracy  
Typical Spectral Noise  
Gain 1: 1 Hz  
10 Hz  
100 Hz  
1 kHz  
10 kHz  
Typical Noise Broadband (1 Hz-10 kHz)  
Typical Noise Broadband (2 Hz-22.4 kHz)  
Internal Reference:

VDC  
mA  
4 Digit  
continuous  
%

24 ±1  
Selectable (0, 2, 4, 8, 12 or 20)  
Selectable  
0.1-1,000  
0.5  
[3]  
1 [-120]  
0.22 [-133]  
0.08 [-142]  
0.08 [-142]  
0.07 [-143]  
9 [-101]  
<3 [-110,5]  
1 ±1%  
159.2 ±1%

**DUAL MODE**

Time Constant:  
Long TC Mode  
Med TC Mode  
Frequency Response (-10%):  
High Pass  
Low Pass

Up to 100,000  
10, 100, 1,000 ±20%  
[8] [11]  
[8]

s  
s  
Hz  
kHz

Integration: (Low Frequency Response)  
Velocity (-10%)  
Displacement (-10%)

LED Indicator  
V  
4 Digit  
mV/unit  
V  
ohms  
mV  
type  
watts  
VDC  
VDC  
VDC

0.2 or 2.0 ±20%  
0.1, 1.0, 3.0, 10, 30,  
100 or >200  
±5%  
Selectable 1.0 or 10 ±5%  
Selectable 1.0 or 10 ±5%  
Overload, Fault  
10 ±1  
Selectable  
0.001-9,999  
>±10  
<1  
<50  
RS-485  
6.25  
+28 at 5 mA + Sensor Current  
+15 at 230 mA  
-15 at 140 mA

Range  
Output Impedance  
DC Offset  
Serial Interface  
Total Power Required (maximum)  
Power Required:

[10]  
[4]

**NOTES:**

- [1] Double width unit.
- [2] Measured at gain of 1 mV/pC with 1 nF source capacitance.
- [3] Measured at gain of 1 with low noise ICP @ simulator (high pass filter = 0.2 Hz).
- [4] Maximum number of 443B102 Dual Mode Signal Conditioners that can be powered by (1) 441A101 is (4). Other modules must be calculated not to exceed total power of 30 watts.
- [5] Measured at gain of 1,000 (60 dB), input referred.
- [6] Measured at gain of 10V/pC (80 dB) with 1 nF source capacitance, input referred.
- [7] Long time constant mode only.
- [8] Depends on gain setting. LCD displays value when gain is entered.
- [9] Can be increased using optional external 472B Series charge attenuator.
- [10] Must be used with PCB 440 series mainframe chassis with computer control (RS-232).
- [11] When in ICP @ mode, long TC is true DC response.
- [12] See PCB Declaration of Conformance PS024 for details.

**SUPPLIED ACCESSORIES:**

Model 070A02 10-32 Jack to BNC Plug Adaptor  
EE-79 443B Control Software (1 CD ROM)



*All specifications are at room temperature unless otherwise specified.*

ICP® is a registered trademark of PCB Group, Inc.

In the interest of constant product improvement, we reserve the right to change specifications without notice.

Drawn: *DB*  
Date: 12/13/05

Engineer: *Bink*  
Date: 12/13/05

Sales: *WDX*  
Date: 12/14/05

Approved: *MD*  
Spec Number:  
14471



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**CHARGE MODE**

Input  
Sensitivity Adjustment  
Charge Sensitivity  
Accuracy

Typical Spectral Noise  
Gain 1 mV/pC:

- 1 Hz
- 10 Hz
- 100 Hz
- 1 kHz
- 10 kHz

Typical Noise Broadband (1 Hz-10 kHz)  
Typical Noise Broadband (2 Hz-22.4 kHz)  
Internal Reference:

**Drift**

**PHYSICAL**

**Connectors:**

Input  
Output  
Ext Zero

**Size (H x W):**

**Weight**

**Temperature**

100,000 (maximum)

Selectable  
0.0001-10  
0.5

- μV/√Hz [dB]
- μV/√Hz [dB]
- μV/√Hz [dB]
- μV/√Hz [dB]
- μV/√Hz [dB]
- μV [dB]
- fC
- pC RMS
- Hz
- pC/s
- type
- type
- type
- in
- [mm]
- lb [kg]
- °F [°C]

[9]

[2]

[2]

[6]

[7]

[1]

[1]

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**CE** [12]

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Drawn: *VJA*  
Date: *12/13/05*

Engineer: *BIMH*  
Date: *12/13/05*

Sales: *WDC*  
Date: *12/14/05*

Approved: *MM*

Spec Number:  
14471



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