

PART NUMBER  
SPEC-AIM8

### AIM8 Specifications

#### Input Characteristics

Input Channels (local): 4 differential and balanced to ground  
Gain Selection: Software selectable Instrumentation Amplifier Gain (IAG): x1, x10, x100 and x1000.

Input Dynamic Range: x1 ±10V max  
x10 ±1V max  
x100 ±100mV max  
x1000 ±10mV max

Input Protection: ±15V max (powered)  
±10V max (unpowered)

Input Resistance: 1MΩ, each input to common

Common Mode Voltage: ±10V

Common Mode Rejection: >90dB, dc to 60Hz

Accuracy: ±(0.01% + 10μV)

Nonlinearity: 0.01% of full scale

Bandwidth: Software selectable single pole filter (-3dB) dc to 10Hz, dc to 1kHz and wideband (dc to 3kHz)

Settling Time (to 0.01%): 0.7ms wideband  
2.5ms @ 1kHz  
250ms @ 10Hz

Noise: 2μVpp, 0.1 to 10Hz  
4μVpp, 10 to 1000Hz

Temperature Coefficient:

Gain: ±50ppm/°C

Offset (adjustable to zero): 2.5μV/°C @ x10, x100 and x1000 IAG  
4μV/°C @ x1 IAG

#### Balance or Zero Suppression Characteristics:

Voltage Range: Jumper selectable off, ±100mV or ±1V typical; On, off, or zero (ground) software selectable

Balance: Manual, multiturn potentiometer per channel

Temperature Coefficient: 2.5μV/°C on ±100mV  
5μV/°C on ±1V

#### Excitation Characteristics:

Voltage Range: 0 to +10V, adjustable per channel and software readable

Current: +100mA max per channel

Protection: Short to ground, 20s max at full power

Temperature Coefficient: 200ppm/°C

Bridge Completion Facilities: Quarter, Half and Full Bridge

Power Requirements: +15Vdc 75mA - No load  
-15Vdc 30mA  
+5Vdc 75mA

BRUNING 40-21 62198

LTR	REVISIONS	APP.	DATE	DRN.	DATE
A	11673 RELEASE	MS	7/31/80	CKD. MS	8/12/80
				APP.	DATE

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SPECIFICATIONS

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