

Specifications

AIM1A ANALOG INPUT MODULE 1

**PART NUMBER
SPEC-AIM1A**

Input channels:

Global: 8 inputs from slots 3-10

Local: 8 differential or 16 single ended

Input characteristics:

Global programmable gain amplifier:

Software programmable gains. x1, x2, x5, x10

Input range: x1, $\pm 10V$

x2, $\pm 5V$

x5, $\pm 2V$

x10, $\pm 1V$

Δ Accuracy: x1, x2, Gain, $\pm (0.01\% + 50\mu V)$, x5, x10, Gain, $\pm (0.015\% + 50\mu V)$

Non-linearity: $\pm 0.005\%$ of F.S.

Temperature coefficient: $\pm (0.001\% + 20\mu V)/^{\circ}C$

Input noise voltage: 30uV p-p, 0.1Hz to 10kHz

Settling time to 0.01%. 6us

Slew rate: 10V/us

Small signal bandwidth: 280kHz

Local instrumentation amplifier:

Switch selectable gains: x1, x10, x100

Input range. x1, $\pm 10V$

x10, $\pm 1V$

x100, $\pm 100mV$

Input protection. $\pm 30V$ max (Powered)

$\pm 10V$ max (Unpowered)

Accuracy:

x1, $\pm (0.01\% + 20\mu V)$

x10, x100; $\pm (0.01\% + 10\mu V)$

Non-linearity. $\pm 0.005\%$ of F.S.

Temperature coefficient:

x1, $\pm (0.001\% + 10\mu V)/^{\circ}C$

x10, $\pm (0.002\% + 4\mu V)/^{\circ}C$

x100, $\pm (0.002\% + 2\mu V)/^{\circ}C$

Common mode rejection ratio: $>80dB$, DC to 60Hz

Input bias current. $<1nA$

Input resistance. $>100M\Omega$

Input noise voltage:

5uV p-p, 0.1Hz to 10Hz

10uV rms, 10Hz to 30KHz

LTR	REVISIONS	APP.	DATE	DRN.	DATE
A	RELEASED 7-81		11-1-83	CKD.	DATE
B	REVISED 10-85	MS	4-30-86	APP.	DATE

KEITHLEY Keithley Instruments Inc.
Cleveland, Ohio 44139

SPECIFICATIONS

**PART NUMBER
SPEC-AIM1A**

Settling time to 0.01%
 x1, 15us
 x10, 30us
 x100, 75us
 Slew rate (x1). 10V/us
 Small signal bandwidth: 130kHz

Global 10.000 volt reference:
 Accuracy. $\pm 0.01\%$
 Temperature coefficient: $\pm 0.002\%/^{\circ}\text{C}$
 Load current. 10mA max
 Load regulation: $\pm 0.005\%/mA$
 Noise: 20uV p-p, 0.1Hz to 10Hz
 10uV rms, 10Hz to 30kHz

NOTE: All amplifier specifications with respect to input.

LTR	REVISIONS	APP.	DATE	DRN.	DATE	KEITHLEY Keithley Instruments Inc. Cleveland, Ohio 44139
A	RELEASED 9481		11-1-83	CKD.	DATE	
B	SEE PG. 1	MS	4-30-85	APP.	DATE	
				SPECIFICATIONS		PART NUMBER
						SPEC- AIMIA