

Automation Components, Inc.



AIM1 Analog Input to Optically Isolated Analog Output

The AIM1 optically isolates an analog (voltage or current) input signal from its corresponding output signal. The factory calibrated output is linear and proportional (1:1 ratio) to the input signal. The AIM1 will accept a 0 to 5 VDC, 0 to 10 VDC, or 0 to 20 mA input span and output any one of those same ranges. It requires one external 24 VAC isolation transformer with floating secondary for power and has an onboard 24 VAC isolation transformer to supply the isolated output.

Applications: Grounded Electrical Actuator Isolation, Florescent Light Dimmer Isolation, Ground Loop Isolation, Variable Frequency Motor Drive Isolation, General Analog Signal Input and Output Isolation

The AIM1 is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

PRODUCT SPECIFICATIONS	
Supply Voltage:	24 VAC (+/- 10%), 50/60 Hz
Supply Current:	100 mA maximum
Input Voltage Signal Range (@ Impedance):	0 to 5 VDC @ 20,000Ω, 0 to 10 VDC @ 20,000Ω
Input Current Signal Range (@ Impedance):	0-20 mA @ 250Ω
Output Voltage Signal Range (@ Impedance):	0 to 5 VDC @ 5,000Ω, 0 to 10 VDC @ 5,000Ω (20 mA Max Output)
Output Current Signal Range (@ Impedance):	0-20 mA (Source or Sink) @ 500Ω
Voltage Mode Accuracy:	+/- 1%
Current Sink Mode Accuracy:	+/- 2%
Current Source Mode Accuracy:	+/- 1%
Linearity:	+/- 1%
Analog Optical Isolation:	600VAC / 1500 VDC Maximum
Connections:	45° Captive screw Terminal Blocks
Wire Size:	12 (3.31 mm²) to 22 AWG (0.33 mm²)
Terminal Block Torque Rating:	0.5 Nm (Minimum); 0.6 Nm (Maximum)
Operating Temperature Range:	35 to 120°F (1.7 to 48.9°C)
Operating Humidity Range:	10 to 95% non-condensing
Storage Temperature:	-20 to 150°F (-28.9 to 65.5°C)
Snaptrack Material:	Polyvinyl Chloride (PVC)
Snaptrack Flammability Rating:	UL94 V-0
Product Dimensions:	(L) 3.25" (W) 3.42" (H) 1.50" (82.55 x 86.87 x 38.1 mm)
Product Weight:	0.39 lbs. (0.175 Kg)
Agency Approvals:	RoHS2, WEEE



X



3.42" (86.99mm)		3.25" (82.55mm) 3.88" (98.55mm)
Board Only	0.70" (17.78mm) Snap Track	Snap Track

STANDARD ORDERING Model # Example: AIM1 - OR- 101293		
Model #	ltem #	Description
AIM1	101793	Analog Input to Optically Isolated Analog Output
Note*: An external 24 VAC isolation transformer is required (see below)		

ACCESSORIES		Model # Example: LE105 -0R- 102553
Model #	ltem #	Description
LE105	102553	Primary Voltage: 24 VAC, 50/60 Hz Secondary Voltage: 24 VAC (VA: 40) (Hubs: 1) (Manual Reset: TC)
A/DRC 3.88 X 3.25	142621	DIN Rail Adapter Kit

