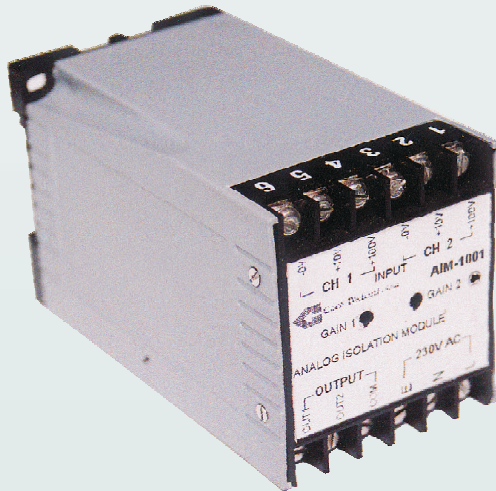


Analog Isolation Module



Choice of over 100 Input - Output types

Calibrated or Adjustable Models

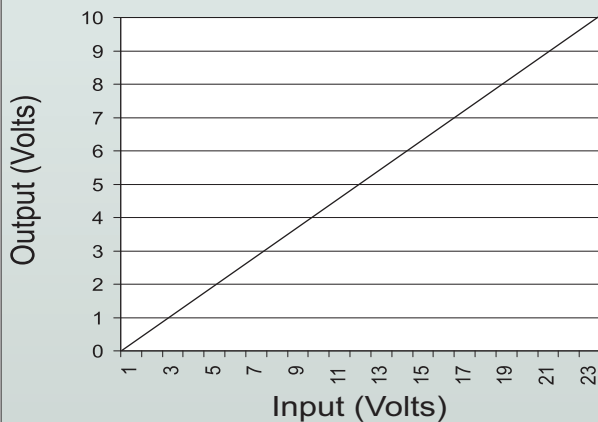
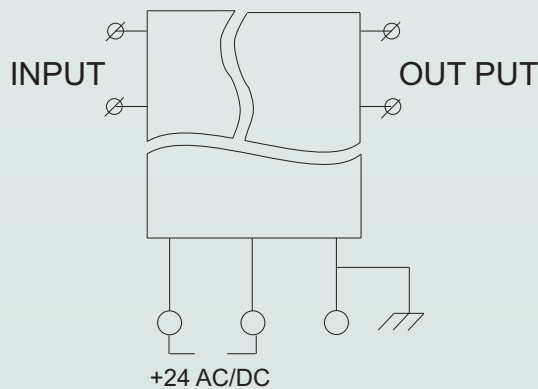
DIN Rail or Wall Mounting

Dust Ingress Water splash protected

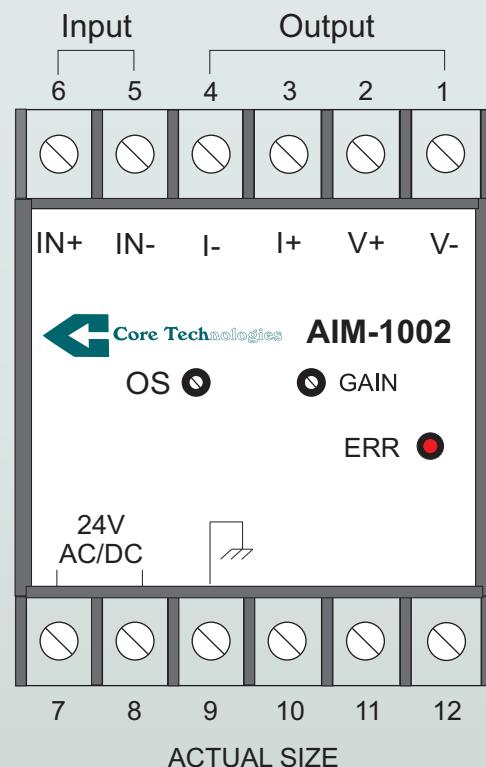
AC or DC 24 Volt Operation

Built-in EMI/ RFI Protection

2 KV DC Three Way Isolation



Input Vs Output Characteristics



... A product of 100 % indigenous Research & Engineering

SPECIFICATIONS

(The specifications are at 25°C, supply voltage 24 Volts and Relative Humidity less than 70%)
Specifications Applicable for all models AIM-1XXX

ISOLATION : THREE WAY isolation :

750 V (rms) – 50Hz/1000 V – DC Continuous
Insulation resistance >108 ohms @ 500 VDC

POWER : DC 15 to 36 V or AC 24VAC (rms) +10 / -30%.
Rating VA = 1.0 W nominal.

SIGNAL CONDITIONING : Common Mode Rejection

(CMR) > 140 dB

Normal Mode Rejection @50 Hz >80 dB (Filtering 5 Pole Bessel filter used in all models with –3 dB cut off frequency at 3.0 Hz.)

ACCURACY

The second digit of the model number AIM-1BXX defines:
B=1, fully calibrated model with trace-ability to NABL as per the specifications claimed below.

These specifications are referred to span at the output.

Linearity error < 0.01%.

Accuracy of calibration + 0.1 %.

Zero error <+ 0.1%.

Offset Temp. drift <+ 0.05 mV/ o C

Gain drift < 50 ppm / o C

B=0, un-calibrated model with potentiometer adjustments available on the front plate of the module for adjustability of span and zero, at site by the user. Both parameters are adjustable between +/-20 % of span.

PHYSICAL

Width 63, Height 76, Depth 115 mm, Weight 125g.

ENVIRONMENTAL

Operating temperature Range -10 to 50°C

Relative Humidity 0 to 90% non condensing

SELECTION OF INPUTS

Model Number AIM-1XCX

A choice of 9 INPUTS is available. The third digit of Model number (shown in bold above) defines the Maximum INPUT

C =	INPUT RANGE	Zin (Ohm)
1	0 to 0.1 V	980 K
2	0 to 1.0 V	980 K
0	0 to 10 V	980 K
3	0 to 20 V	652 K
4	0 to 100V	517 K
5	0 to 200 V	504 K
6	0 to 400 V	498 K
7	0 to 600 V	495 K
8	4 to 20 mA*	125.0 Ohm

The 4-20 mA output is Sinking Type with Source supply range from 10.5 to 36 Volts.

SELECTION OF OUTPUTS

Model Number AIM-1XXD

A choice of 5 OUTPUTS is available. The FOURTH (LAST) digit of Model number (shown in bold above) defines the OUTPUT of the specified model.

D =	OUTPUT	TYPE
0	0 to 10 Volt	Single output
1	0 to 20 Volt	Single output
2	0 to 10 Volt & 4-20 mA	Dual output
3	4 to 20 mA	Single output
4	0 to 20 mA	Single output

PROTECTION

EMI/RFI surge protection up to 1 KV 10 micro Sec. Spikes

Common Mode voltage up to 1.5 KV DC continuous

Dust and water ingress Protection Ip45

Due to continuous R & D, at Core Technologies, the Specifications given in this document may undergo changes or improvements, without prior notice.

APPLICATIONS

Galvanic Isolation Requirements in:

- Battery Voltage Measurement
- DC Signal Isolation For PLC Interfacing
- Ground Loop Error Elimination.
- DC Drive Isolation
- Tacho - Generator Signal Interfacing
- Removal of Excessive Common Mode Voltages
- Process Data Logging and Recording

Our Other Products

- ★ Wide Bandwidth Analog Isolation Modules DC - 5 KHz
- ★ Strain Gauge / Load Cell Isolation Signal Conditioning
- ★ RTD Pt-100 Temperature Isolation Transmitters
- ★ Thermocouple Signals Isolation Transmitters

Other Related products

- ★ Data Loggers
- ★ Event Sequence Recorders, Analog History Loggers
- ★ Plant Performance Monitoring Systems
- ★ Bagging and Weighing machine Controllers
- ★ Weight indicators / Transmitters
- ★ Automated Weather Monitoring Stations with Sensors