



ANALOG INPUT WITH OPTICAL ISOLATION TO ANALOG OUTPUT

GT-AI Series

The GT-AI analog isolation module is a 3 way isolating analog signal re-scaling module with one input/output channel. It will accept one analog voltage or current input signal, isolate it and re-scale it to another voltage or current output signal. The I/O signals have several pre-calibrated, fixed ranges or may be custom calibrated for various offsets and spans and can be direct or reverse acting to provide signal inversion.

The device has an on-board transformer that provides power supply isolation and also has input/output signal isolation.

The GT-AI also includes a regulated +24 Vdc power output that can be used to power a transducer or a resistance input. It features top-adjust trim-pots for offset and gain control, source or sink capabilities and an LED power indicator. Various I/O signal types are easily selected with DIP switches.

PRODUCT HIGHLIGHTS

* Input/Output signal isolation
* Field selectable input/output ranges
* Direct or reverse acting
* Regulated power supply output
* Compact and economical
* Snap track mounted



SPECIFICATIONS



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| DESCRIPTION | ENGINEERING SPEC |
| POWER SUPPLY | 24 Vac ±10% |
| CONSUMPTION | 150 mA maximum |
| OPERATING CONDITIONS | 0 to 50°C (32 to 122°F) 5 to 95 %RH non-condensing |
| STORAGE CONDITIONS | -30 to 70°C (-22 to 158°F) 5 to 95 %RH non-condensing |
| WIRING CONNECTIONS | Screw terminal block (14 to 22 AWG) |
| ENCLOSURE | Snap track mounting127mm L x 47mm W (5.0” x 3.25”) |
| WEIGHT | 285g (10oz) |
| POWER OUTPUT | **Regulated Power Output:** 24 Vdc ±10% @ 30 mA maximum(use to power an external sensor) |
| INPUT SIGNAL | **Preset Voltage Range:** 0-1, 0-5, 0-10, 0-15, 0-20, 1-5, 2-10, 3-15, and 4-20 Vdc**Adjustable Voltage Offset:** 0-20 Vdc**Adjustable Voltage Span:** 1-20 Vdc**Voltage Impedance:** >10 KΩ |
| PRESET CURRENT RANGE | 0-1, 0-20, and 4-20 mA |
| ADJUSTABLE CURRENT OFFSET | 0-15 mA |
| ADJUSTABLE CURRENT SPAN | 4-20 mA |
| CURRENT IMPEDANCE | 250 Ω (1 KΩ for 0-1 mA range) |
| OUTPUT SIGNAL | **Preset Voltage Range:** 0-5, 1-5, 0-10, and 0-20 Vdc**Preset Voltage Offset:** 0, 1, and 2 Vdc**Preset Voltage Spans:** 1, 3, 4, 5, 6, 7, 8, and 10 Vdc**Adjustable Voltage Offset:** 0-10 Vdc**Adjustable Voltage Span:** 1-20 Vdc**Voltage Impedance:** >10 KΩ |
| PRESENT CURRENT RANGE | 0-20 and 4-20 mA |
| PRESET CURRENT OFFSET | 0, 4, and 8 mA |
| PRESET CURRENT SPANS | 4-20 mA |
| CURRENT IMPEDANCE | 750Ω |
| CURRENT SIGNAL TYPE | Source or Sink (jumper selectable) |
| SIGNAL DIRECTION | Normal/Reversable via single jumper |
| ACCURACY | ±1% typical |
| COUNTRY OF ORIGIN | Canada |