

ARM Analog Current/Voltage Rescaling Module

The ARM is an analog rescaling module which accepts an analog (voltage or current) input signal and rescales it to another voltage or current output signal. The top-adjust trimmer potentiometers can be used to make fine adjustments to output ranges for maximum flexibility. This device can attenuate an input signal to 100%. The ARM also has an adjustable gain and offset. The output gain can be adjusted from 1 to 25 times the input (gain will vary depending on input). The offset of the output can be adjusted anywhere from 0 to +/- 20 VDC. The ARM also has the ability to reverse an input signal. The ARM has a regulated 20 VDC power

supply output to power sensors. The ARM can also accept a resistance input by using voltage divider applications. The ARM is field calibratable, however, factory calibration is available upon request for an additional charge. This will speed up installation time for the end user.

Applications: Resistance to Current or Voltage Conversion, Voltage to Current or Voltage Conversion, Current to Current or Voltage Conversion, Shrink or Expand Sensor Ranges, Increase Analog Input Resolution, Reverse a Signal, Adapt Non-compatible Signals

The ARM 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 or 24 VDC, (+/- 10%), 50/60 Hz |
|---|---|
| Supply Current: | 200 mA maximum |
| Input Voltage Signal Range (@ Impedance): | 0-35 VDC @ 1,000,000Ω |
| Input Current Signal Range (@ Impedance): | 0 to 44 mA @ 250Ω |
| Input Resistance Signal Range: | 0 to 500,000Ω |
| Field Adjustable Ranges: | Multi-turn potentiometers |
| Output Voltage Signal Range: | 0.25 VDC minimum to 20 VDC maximum |
| Output Current Signal Range: | 44 mA maximum, Signal Gain 1 to 25 times (nominal) depending on input value |
| Output Accuracy: | +/- 1% |
| Output Signal Attenuation: | 0 to 100% |
| Output Signal Offset: | 0.25 to 20 VDC |
| Output Signal Inversion (RA): | 20 to 0.25 VDC (nominal) |
| Output Current Load Impedance: | 750Ω @ 20 mA |
| Output Voltage Load Impedance: | 3300Ω @ 20 VDC +/- 10% / 400Ω @ 10 VDC +/- 10% |
| Regulated Power Output: | 20 VDC +/- 10%, 30 mA 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) 3.69" (W) 2.17" (H) 1.00" (93.73 x 55.12 x 25.54 mm) |
| Product Weight: | 0.200 lbs. (0.0907 Kg) |
| Agency Approvals: | RoHS2, WEEE |



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| STANDARD ORDERING Model # Example: ARM -OF 102028 | | |
|---|--------|---|
| Model # | ltem # | Description |
| ARM | 102028 | Analog Current/Voltage Rescaling Module |

| SPECIAL CALIBRATION ORDERING Model # Example: C/ARM -OR- 137061 | | | | | -OR- 137061 |
|---|--------|--------------------------|--|--|-------------|
| Model # | ltem # | Description | | | |
| C/ARM | 137061 | Specify Input and Output | | | |

| ACCESSORIES | | Model # Example: A/D0008 -OR- 142583 |
|------------------|--------|--|
| Model # | ltem # | Description |
| A/D0008 | 142583 | Transient Voltage Suppressor, Bi-directional, 56VAC/DC, 1500W |
| A/DRC 2.7 X 2.18 | 142626 | DIN Rail Adapter Kit |
| ENC1 | 102472 | 20 Gauge Metal Enclosure, Designed to Hold Interfaces Products |