

### **Product Description**

The ARM is an analog re-scaling module which accepts an analog voltage or current input signal and re-scales it to another voltage or current output signal. Several preset ranges are jumper selectable. The top-adjust trimmer potentiometers can be used to make fine adjustments to output ranges for maximum flexibility. The ARM 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) to the ARM. The offset of the output can be adjusted anywhere from 0 to  $\pm$  20VDC for the ARM

The ARM also has the ability to reverse an input signal. The ARM also has a regulated 20VDC power supply output to power sensors.

The ARM can accept a resistance input by using voltage divider applications. See Tech Tip 7 for a 3 wire resistance input or Tech Tip 50 for a 2-wire resistance input. If a higher power output is required, look at the specification for the ASA.

The ARM is covered by ACI's Two (2) Year Limited Warranty, which is located in the front of ACI'S SENSORS & TRANSMITTERS CATALOG or can be found on ACI's Website, which is: www.workaci.com.

Specify: ARM

(ACI can calibrate units before shipping for a nominal charge)

### Product Specifications

Supply Voltage	Regulated 24VDC +/- 10% << 0.2 volts
	ripple Regulated 22 to 26VAC
Supply Current	200mA max.
Regulated Power Output	20VDC +/- 10% (for other Power Output
	voltages, contact ACI) 30mA maximum
Input Voltage Range	0 to 35VDC
Input Current Range	0 to 44mA
Input Voltage Impedance	1,000,000Ω
Input Current Impedance	250Ω
Field Adjustable Ranges	Multi-turn potentiometers
Output Voltage Range	0VDC minimum to 20VDC maximum
Output Accuracy	+/-1%
Current Output Range	44 mA maximum Signal Gain 1 to 25 times
	(nominal) depending on input value
Output Signal Attenuation	0 to 100 %
Output Signal Offset	0 to 20 volts
Output Signal Inversion (RA)	20 to 0 volts (nominal)
<b>Output Current Load Impedance</b>	750Ω @ 20mA
Output Voltage Load Impedance	3300Ω @ 20 volts +/- 10%
	400Ω @10 volts +/- 10%
Operating Temp/RH	32 to 120° F (0 to 48.9° C) / 10 to 95% non condensing
Approval	RoHS

Wiring Diagrams available at www.workaci.com

## **Product Data**

ARM

Analog Current or Voltage Re-scaling Module

# Interface Devices



TEMPERATURE

**RELATIVE HUMIDITY** 

PRESSURE

CURRENT

GAS SENSORS

#### **Attributes:**

- Field selectable input & output ranges
- Reverse acting or direct acting output
- •LED power indicator
- •Compact and economical
- •Snap track included

#### **Applications:**

- Resistance to current or voltage conversion
- Voltage to current or voltage conversion
- Current to current or voltage conversion
- •Reduce/Increase Output signal ranges
- •Increase analog input resolution
- Signal Inversion



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