

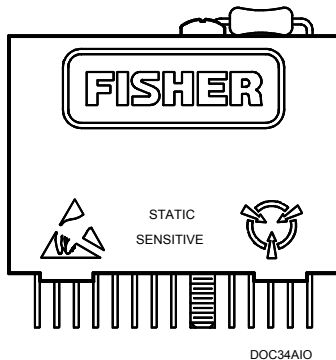
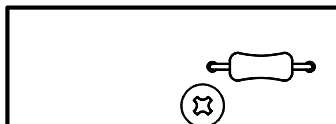
# Analog Output Source Module

The Analog Output Source Module plugs into a ROC300-Series Remote Operations Controller or FloBoss™ 407 Flow Manager, and provides both a current output and a voltage output for powering analog devices. A scaling resistor is used for adjusting the range of the current output.

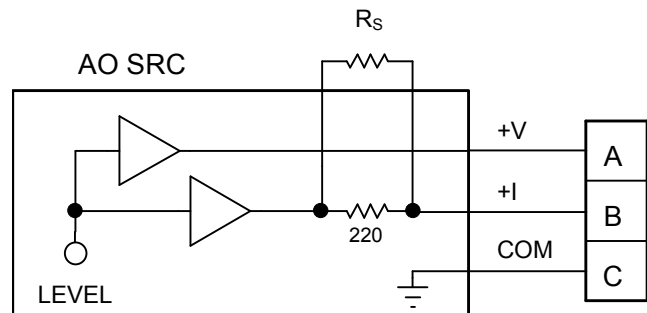
Field wiring connections are made through a separate terminal block, which plugs in next to the module. This design facilitates replacement of the module without disconnecting field wiring.

## Specifications

FIELD WIRING TERMINALS	VOLTAGE OUTPUT (CONT'D)
<p><b>A:</b> Voltage Output <b>B:</b> Current Output <b>C:</b> Common</p>	<p><b>Resolution:</b> 12 bits. <b>Accuracy:</b> 0.1% of full-scale output (from 20 to 30°C). 0.5% of full-scale output (-40 to 65°C). <b>Settling Time:</b> 100 microseconds maximum.</p>
<p><b>VOLTAGE OUTPUT</b> <b>Type:</b> Voltage source. <b>Range:</b> 1 to 5 V dc with 0 to 5.25 V dc overranging. 25 mA maximum.</p>	<p><b>Reset Action:</b> Output goes to zero percent output or last value (software configurable) on power-up (warm start) or on watchdog timeout.</p>



Analog Output Module



Note: A zero-ohm resistor is supplied for  $R_s$ .

Simplified Output Schematic

**Specifications (Cont'd)**

**CURRENT OUTPUT**

**Type:** Current loop.

**Range:** 4 to 20 mA with 0 to 22 mA overranging, adjusted by scaling resistor. A 0 Ω resistor is supplied.

**Loop Source:** 11 to 30 V dc, as supplied by ROC for “+T” power (typically 24 V dc).

**Loop Resistance at 12 V dc:** 0 Ω minimum, 250 Ω maximum.

**Loop Resistance at 24 V dc:** 200 Ω minimum, 750 Ω maximum.

**Resolution:** 12 bits.

**Accuracy:** 0.1% of full-scale output (20 to 30°C). 0.5% of full-scale output (-40 to 65°C).

**Settling Time:** 100 microseconds maximum.

**Reset Action:** Output goes to zero percent output or last value (software configurable) on power-up (warm start) or on watchdog timeout.

**POWER REQUIREMENTS**

**Module Alone:** 24 mW typical.

**Module w/Current Loop:** 400 mW @ 4 mA output to 590 mW @ 20 mA output.

**OUTPUT ISOLATION**

Not isolated. Terminal C tied to power supply common.

**VIBRATION**

20 Gs peak or 0.06 in. double amplitude, 10 to 2,000 Hz, per MIL-STD-202, method 204, condition F.

**MECHANICAL SHOCK**

1500 Gs 0.5 milliseconds half sine per MIL-STD-202, method 213, condition F.

**WEIGHT**

37 grams (1.3 ounces) typical.

**CASE**

Solvent-resistant thermoplastic polyester, meets UL94V-0. Dimensions are 15 mm D by 32 mm H by 43 mm W (0.6 in. D by 1.265 in. H by 1.69 in. W), not including pins.

**ENVIRONMENTAL**

Meets the environmental specifications of the ROC or FloBoss in which the module is installed, including temperature, humidity, and transient protection.

**APPROVALS**

Approved by CSA for hazardous locations Class I, Division 2, Groups A, B, C, and D.

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