

5.11. Analog Output – CC-PAON01

Function

The Analog Output (AO) Module delivers high-level constant current to actuators and recording/indicating devices.

Notable Features

- Extensive self-diagnostics
- Optional redundancy
- Safe-state (FAILOPT) behaviors configurable on a per channel basis
- Output read-back and alarm on discrepancy
- Non-incendive output

FAILOPT

Series C AO module supports the FAILOPT parameter on a per channel basis. The user can configure each channel to either HOLD LAST VALUE, or SHED to a SAFE VALUE. The Output will always go to zero, the safe state, if the IOM device electronics fails.

Open-wire Detection

This Series C IO function will be able to detect and annunciate open field wire with a Channel Soft Failure indication

Detail Specifications - High Level Analog Output

Parameter	Specification		
Input / Output Model	CC-PAON01 - High-Level Analog Output		
IOTA Models	CC-TAON01	Non-Redundant	6"
	CC-TAON11	Redundant	12"
Output Type	4-20 mA		
Output Channels	16		
Output Ripple	< 100 mV peak-to-peak at power line frequency, across 250 Ω load		
Output Temperature Drift	0.005% of Full Scale/ $^{\circ}$ C		
Output Readback Accuracy	$\pm 4\%$ of Full Scale		
Output Current Linearity	$\pm 0.05\%$ of Full Scale nominal		
Resolution	$\pm 0.05\%$ of Full Scale		
Calibrated Accuracy	$\pm 0.35\%$ of Full Scale (25 $^{\circ}$ C) including linearity		
Directly Settable Output Current Range	0 mA, 2.9 mA to 21.1 mA		
Maximum Resistive Load (24 V supply = 22 VDC through 28 VDC)	800 ohms		
Maximum Output Compliant Voltage (24 V supply = 22 VDC through 28 VDC)	16 V		
Maximum Open Circuit Voltage	22 V		
Response Time(DAC input code to output)	Settles to within 1% of final value within 80 ms		

Parameter	Specification
Gap (0 mA) of Output to Field on Switchover	10 ms maximum (applies to Redundancy only)