## 4AO Module for the MOSCAD-L RTU

The 4AO Analog Output module is an accessory to the MOSCAD RTU family that allows up to 4 other on-site pieces of equipment to be connected to, and controlled by, the RTU. Examples include variable speed motors, proportional gate valves, chart recorders, and more.



### FEATURES / BENEFITS

#### Data Output

Under the control of the defined Application Program, the CPU module will move the current data value of one or more logic variables from the CPU module into the 4AO module via the motherboard. The 4AO module will pass that data through on-module digital-to-analog converters (DAC), one converter for each output event, to the controlled device.

◆ *The application in the CPU module determines the voltage or current output allowing the system to control valves, chart recorders, etc.* 

#### Dual Outputs per Channel

Each of the 4 independent output channels provides both 4-20 ma and 5 Vdc outputs. All outputs are protected against surges and other disturbances.

◆ *Appropriate signal outputs are provided for virtually all system needs.* 

◆ Surge Withstand Capability (SWC) conformance is assured for the safety of the equipment and technicians.



# 4AO Analog Output Module

for the MOSCAD-L RTU

#### **SPECIFICATIONS**

Analog Outputs						
Channels:	4; each may be calibrated for either 4-20 ma current output or 0-5 Vdc voltage output					
Resolution:	12 bits (including sign)					
Overall Accuracy:	<b>Overall Accuracy:</b> $\pm 0.1\%$ of full scale @ $+25$ °C, $\pm 1$ bit					
Stability:	< 50 ppm per °C					
Output Load:	t Load: $4-20 \text{ ma}: < 250 \text{ ohm}$ when loop P.S. = $12 \text{ Vdc}; < 750 \text{ ohm}$ when loop P.S. = $24 \text{ Vdc}$					
	0-5 Vdc: >10 kohm					
Output Isolation:	2.5 kVoptical isolation between outputs					
Update Time:	per channel: 30 msec with 1 channel used, 120 msec with 4 channels used					
Diagnostics:	LEDs on CPU module: 2 ouput active, 1 update and 1 uncalibrated per channel					
Environment Temperature:	Operating: $-30$ to $+60^{\circ}$ C Storage: $40$ to $+85^{\circ}$ C					

Humidity: 0-95% RH @ +50°C

Connection Chart	Term	Function	Term	Function	Term	Function	Term	Function
	1	Vout 1	6	Vout 2	11	Vout 3	16	Vout 4
	2	Retn 1	7	Retn 2	12	Retn 3	17	Retn 4
	3	Iout 1	8	Iout 2	13	Iout 3	18	Iout 4
	4	n/c	9	n/c	14	n/c	19	Loop PS +
	5	n/c	10	n/c	15	n/c	20	Loop PS -

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