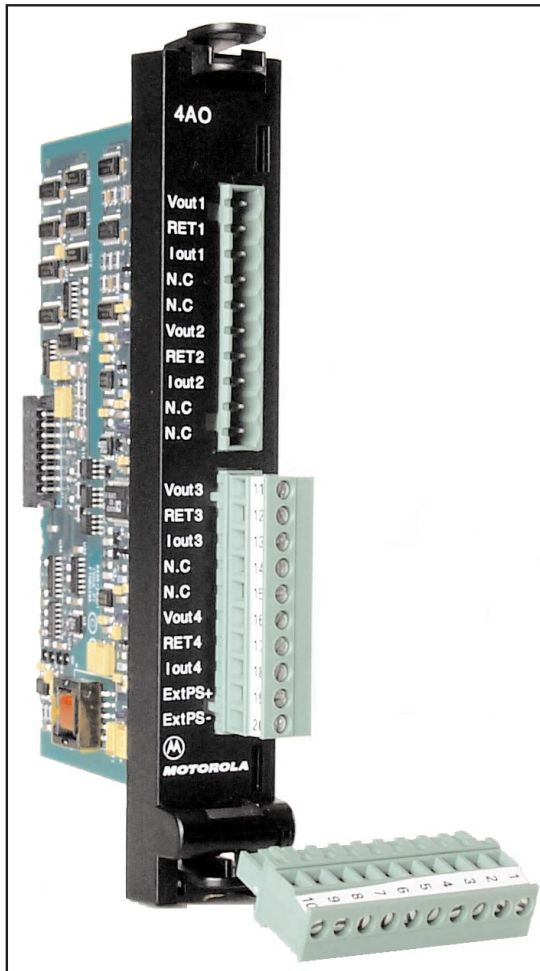# 4AO Module
for the MOSCAD-L RTU

FEATURES / BENEFITS

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.

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.*

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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:	±0.1% of full scale @ +25°C, ±1 bit
Stability:	< 50 ppm per °C
Output Load:	4-20 ma: < 250 ohm when loop P.S. = 12 Vdc; < 750 ohm when loop P.S. = 24 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°C
	Storage: -40 to +85°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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