

Analog Current Output Modules

F2-02DA-1L 2-Ch 4-20 mA Analog Output	
This module requires a 12 VDC user power supply for operation. See the F2-02DA-1 on the previous page if you want to use a 24 VDC supply. All other specifications are the same.	
Number of Channels	2
Output Ranges	4 to 20 mA
Resolution	12 bit (1 in 4096)
Output Type	Single ended, 1 common
Digital Output Points Required	16(Y) output points (12 binary data bits, 2 channel ID bits)
Maximum Loop Supply	30 VDC
Peak Output Voltage	40 VDC (clamped by transient voltage suppressor)
Load Impedance	0Ω minimum
Maximum Load/Power Supply	620Ω/18V, 910Ω/24V, 1200Ω/30V
PLC Update Rate	1 channel per scan maximum (D2-230 CPU) 2 channels per scan maximum (D2-240, D2-250(-) and D2-260 CPUs)
Linearity Error (end to end)	±1 count (0.025% of full scale) maximum
Conversion Settling Time	100 μs maximum (full scale change)
Full Scale Calibration Error (offset error included)	±5 counts max., 20 mA @ 77°F (25°C)
Offset Calibration Error	±3 counts max., 4mA @ 77°F (25°C)

Accuracy vs. Temperature	±50 ppm/°C full scale calibration change (including maximum offset change of 2 counts)
Maximum Inaccuracy	+0.1% @ 77°F (25°C) ±0.3% @ 32 to 140°F (0 to 60°C)
Base Power Required 5VDC	40 mA
External Power Supply	10 to 15 VDC, 70 mA (add 20 mA for each current loop used)
Operating Temperature	32° to 140°F (0° to 60°C)
Storage Temperature	-4° to 158°F (-20° to 70°C)
Relative Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	MIL STD 810C 514.2
Shock	MIL STD 810C 516.2
Noise Immunity	NEMA ICS3-304
Terminal Type (included)	Removable; D2-810CON

One count in the specification table is equal to one least significant bit of the analog data value (1 in 4096).

NOTE 1: Shields should be connected to the 0V of the module or the 0V of the P/S.

NOTE 2: Unused current outputs should remain open (no connections) for minimum power consumption.

