

# Analog Voltage Output Modules

F2-08DA-2 8-Channel Voltage Analog Output	
<b>Number of Channels</b>	8, single-ended, 1 common
<b>Output Ranges</b>	0 to 5V, 0 to 10V
<b>Resolution</b>	12 bit (1 in 4096)
<b>Output Type</b>	Voltage sourcing
<b>Digital Output Points Required</b>	16 (Y) output points (12 binary data bits, 3 channel ID bits, 1 output enable bit)
<b>Base Power Required 5VDC</b>	60 mA
<b>External Power Supply</b>	21.6-26.4 VDC, 140 mA (outputs fully loaded)
<b>Peak Output Voltage</b>	15 VDC (clamped by transient voltage suppressor)
<b>Load Impedance</b>	1-10 kΩ
<b>Load Capacitance</b>	0.01 μF maximum
<b>PLC Update Rate</b>	1 channel per scan maximum (D2-230 CPU) 8 channels per scan maximum (D2-240, D2-250(-1) and D2-260 CPUs)
<b>Conversion Settling Time</b>	400 μs maximum (full scale change) 4.5 ms to 9ms for digital out to analog out

<b>Linearity Error (end to end)</b>	±1 count (±0.025% of full scale) maximum
<b>Full Scale Calibration Error</b>	±12 counts max. unipolar @ 25°C (77°F)
<b>Offset Calibration Error</b>	±3 counts max., unipolar @ 25°C (77°F)
<b>Accuracy vs. Temperature</b>	±57 ppm/°C full scale calibration change (including maximum offset change of 2 counts)
<b>Maximum Inaccuracy</b>	±0.3% @ 25°C (77°F) ±0.45% @ 0-60°C (32-140°F)
<b>Operating Temperature</b>	0° to 60°C (32° to 140°F)
<b>Storage Temperature</b>	-20° to 70°C (-4° to 158°F)
<b>Relative Humidity</b>	5 to 95% (non-condensing)
<b>Environmental air</b>	No corrosive gases permitted
<b>Vibration</b>	MIL STD 810C 514.2
<b>Shock</b>	MIL STD 810C 516.2
<b>Noise Immunity</b>	NEMA ICS3-304
<b>Terminal Type (included)</b>	Removable; D2-8IOCON

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.

