

Analog I/O Units

GT1-AD/DA

Analog Input/Output Units Compatible with MULTIPLE I/O TERMINAL

- Input block incorporates connectors that can be easily mounted or dismounted. (GT1-AD08MX, GT1-DA04MX)
- 8 or 4 inputs.
- 4 outputs.
- High resolution of 1/6,000.
- High conversion speed of 8 ms/8 points or 4 ms/4 points.
- DIN track mounting.

Connector model



Terminal Block Model



Ordering Information

I/O classification	I/O points	I/O connections	Power supply voltage	I/O specification	Model
Analog input	8	Molex connector	24 VDC	4 to 20 mA, 0 to 20 mA, 0 to 5 V, 1 to 5 V, 0 to 10 V, -10 to 10 V	GT1-AD08MX
	4	Terminal block			GT1-AD04
Analog output	4	Molex connector	24 VDC	0 to 5 V, 1 to 5 V, 0 to 10 V, -10 to 10 V 0 to 5 V, 1 to 5 V, 0 to 10 V, -10 to 10 V, 4 to 20 mA	GT1-DA04MX
		Terminal block			GT1-DA04

General Specifications

I/O power supply voltage	20.4 to 26.4 VDC (24 VDC -15%/+10%)*	
Current consumption	I/O Unit interface	Internal circuitry power supply
	50 mA max.	GT1-AD08MX: 100 mA max. GT1-AD04: 100 mA max. GT1-DA04MX: 100 mA max. GT1-DA04: 150 mA max.
Noise immunity	Conforms to IEC 61000-4-4, 2 kV (power line)	
Vibration resistance	10 to 150 Hz, 1.0-mm double amplitude or 70 m/s ²	
Shock resistance	200 m/s ²	
Dielectric strength	500 VAC	
Mounting method	DIN 35 mm-track mounting	
Mounting strength	No damage when 100 N pull load was applied in all directions (10 N min. in the DIN track direction)	
Terminal strength	No damage when 100 N pull load was applied	
Ambient operating temperature	-10°C to 55°C	
Ambient operating humidity	25% to 85% (with no condensation)	
Ambient storage temperature	-25°C to 65°C	
Accessories	I/O Unit Connecting Cable (40 mm)	

* Power for analog I/O is provided from the internal power supply.

Applicable Connector

Note: Refer to page 144 for Peripheral Devices.

Input Specifications

Item	Specifications	Voltage input	Current input
Input type		0 to 5 V, 1 to 5 V, 0 to 10 V, -10 to 10 V	0 to 20 mA, 4 to 20 mA
Maximum signal input		± 15V	± 30 mA
Input impedance		1MΩ min.	Approx. 250 Ω
Resolution		1/6,000 (FS)	
Overall accuracy	25°C	±0.3% FS	±0.4% FS
	-10°C to 55°C	±0.6% FS	±0.8% FS
Conversion speed		8 ms/8 points, 4 ms/4 points	
Conversion output data		Binary data -10 to 10-V range: F448 to 0BB8 full scale Other signal ranges: 0000 to 1770 full scale	
Insulation method		Transistor or photocoupler insulation between inputs and power lines.	

Output Specifications

Item	Specifications	Voltage output	Current output
Output type		0 to 5 V, 1 to 5 V, 0 to 10 V, -10 to 10 V	4 to 20 mA
Output permissible load resistance		5kΩ min.	600 Ω max.
Output impedance		0.5Ω max.	--
Resolution		1/6,000 (FS)	
Overall accuracy	25°C	±0.4% FS	
	-10°C to 55°C	±0.8% FS	
Conversion speed		4 ms/4 points	
DA output data		Binary data -10 to 10 V range: F448 to 0BB8 full scale Other signal ranges: 0000 to 1770 full scale	
Insulation method		Transistor or photocoupler insulation between outputs and power lines.	