

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

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

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

### Applicable Connector

(GT1-AD08MX, GT1-DA04MX)

Type		Model	Remarks	
Molex connector	Solderless terminal	Housing	51030-0330	
		Chain terminal	70058-0004	Corresponding to 24 to 30 AWG
			70058-0022	Corresponding to 22 to 24 AWG
		Press-fit tool	57036-5000	Corresponding to 22 to 26 AWG
		57037-5000	Corresponding to 24 to 30 AWG	

### Input Specifications

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

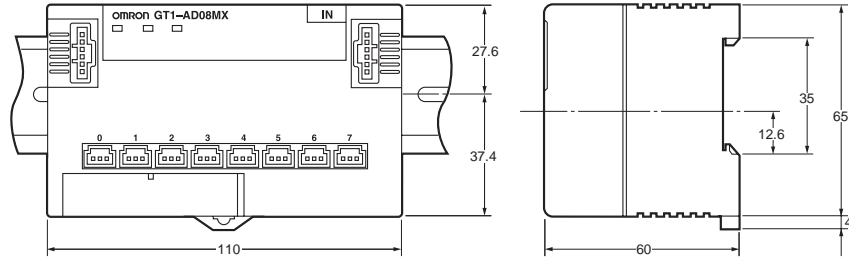
### Output Specifications

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

Dimensions

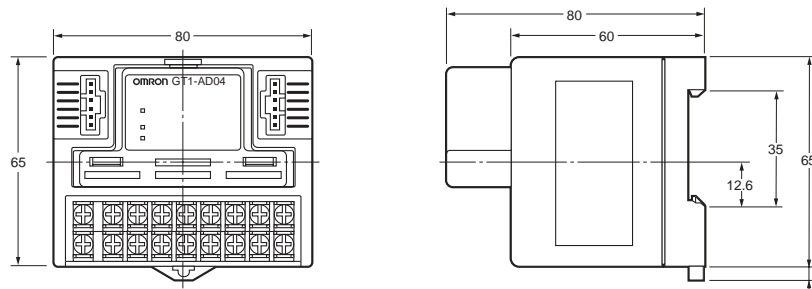
(Unit: mm)

GT1-AD08MX  
GT1-DA04MX  
(Molex Connector Models)



Note: Accessory cable included.

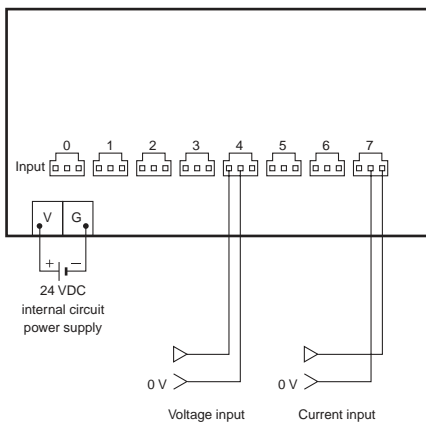
GT1-AD04  
GT1-DA04  
(Terminal Block Models)



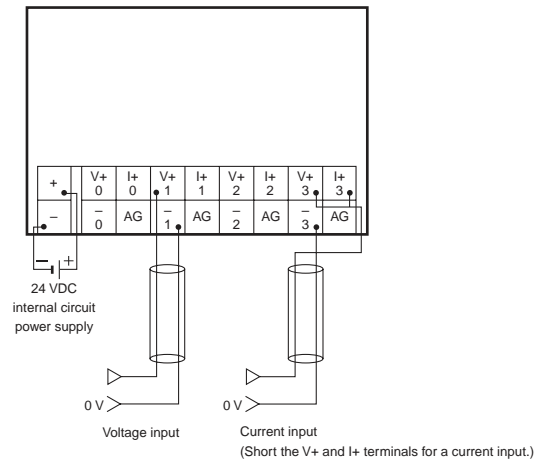
Note: Accessory cable included.

Wiring Diagrams

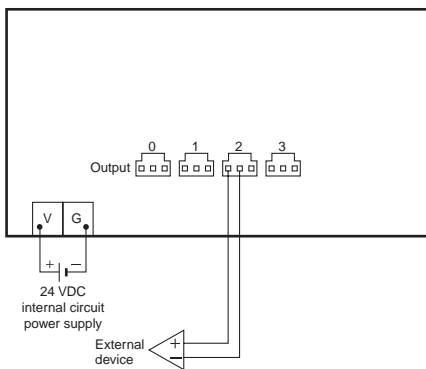
GT1-AD08MX



GT1-AD04



GT1-DA04MX



GT1-DA04

