

GX-□

GX-Series I/O

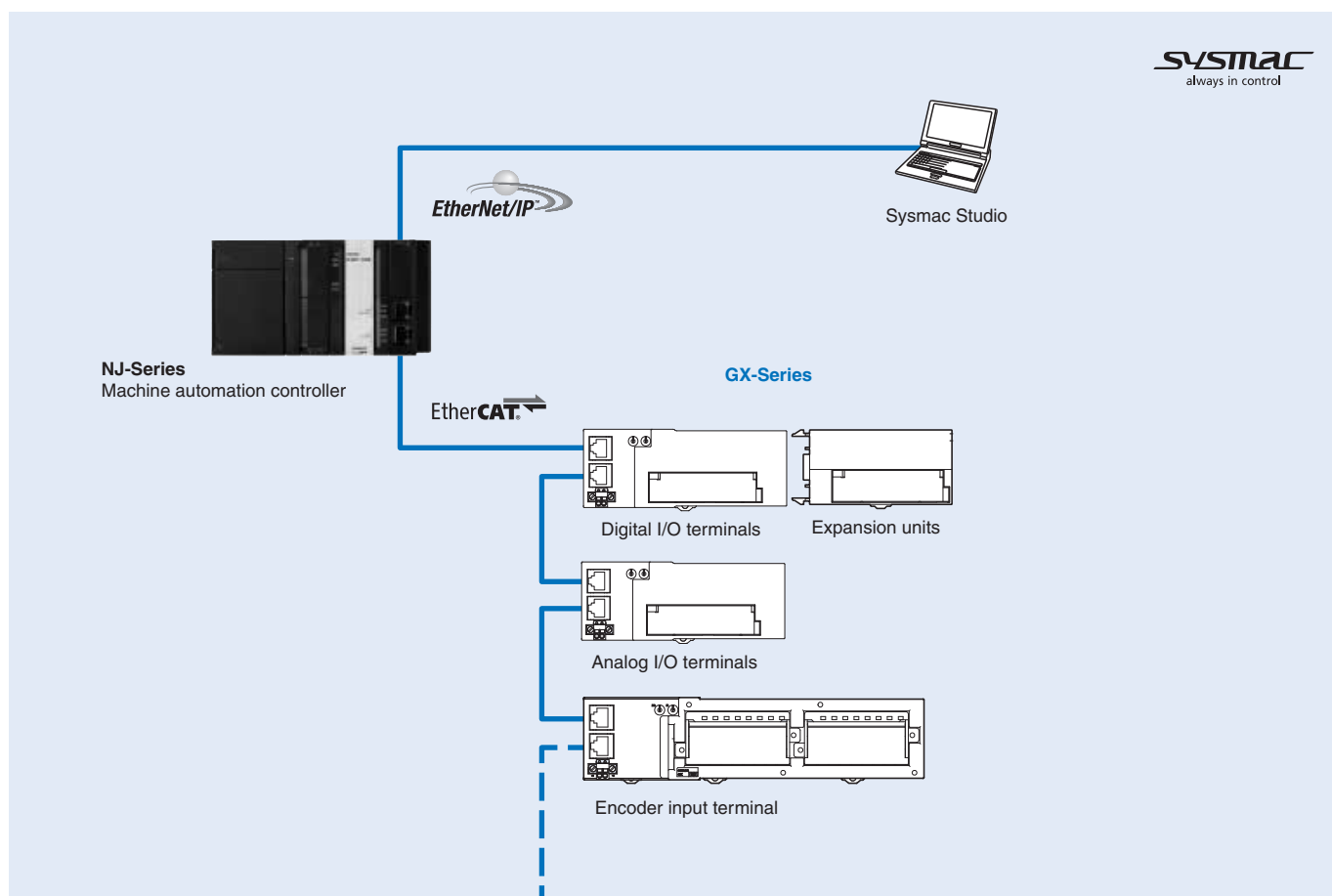
High-speed remote I/O terminals

The GX-Series I/O units provide an extensive line-up of digital I/O terminals, analogue I/O terminals and encoder input terminals.

- Easy set-up: automatic and manual address setting
- Digital I/O terminals with high-speed input functionality, ON/OFF delay of 200 µs max.
- Digital input filters prevent malfunction when status is unstable due to chattering or noise
- Removable I/O terminal for easy maintenance
- Expandable digital I/Os



System configuration



Type designation

GX-ID1612

EtherCAT remote I/O terminal GX-Series

Type

ID: DC input

OD: DC output

MD: DC input/output

OC: Relay output

AD: Analog input

DA: Analog output

EC: Encoder input

Number of I/O

02: 2 points (2CH)

04: 4 points (4CH)

16: 16 points

32: 32 points

Connecting

1: Screw (Common) (2-tier terminal block)

2: Screw (Divided common) (3-tier terminal block)

Input/Output Type

Code	Digital I/O type	Analog I/O type	Encoder input type
1	NPN	—	Open collector
2	PNP	—	—
4	—	—	Line driver
7	—	Current/voltage	—

Specifications

General specifications

GX-Series	Specification
Unit power supply voltage	24 VDC –15% to +10% (20.4 to 26.4 VDC)
I/O power supply voltage	24 VDC –15% to +10% (20.4 to 26.4 VDC)
Noise resistance	Conforms to IEC 61000-4-4, 2 kV (power line)
Vibration resistance	Malfunction 10 to 60 Hz with amplitude of 0.7 mm, 60 to 150 Hz and 50 m/s ² in X, Y and Z directions for 80 minutes <Relay Output Unit GX-OC1601 only> 10 to 55 Hz with double-amplitude of 0.7 mm
Impact resistance	150 m/s ² with amplitude of 0.7 mm <Relay Output Unit GX-OC1601 only> 100 m/s ² (3 times each in 6 directions on 3 axes)
Dielectric strength	600 VAC (between isolated circuits)
Isolation resistance	20 MΩ or more (between isolated circuits)
Ambient operating temperature	–10 to 55°C
Operating humidity	25% to 85% (with no condensation)
Operating atmosphere	No corrosive gases
Storage temperature	–25 to 65°C
Storage humidity	25% to 85% (with no condensation)
Terminal block screws tightening torque ^{*1}	M3 wiring screws: 0.5 Nm M3 terminal block mounting screws: 0.5 Nm
Mounting method	35-mm DIN track mounting

^{*1} Applicable only to 2-tier terminal block and 3-tier terminal block type slaves.

EtherCAT Communications Specifications

Item	Specification
Communication protocol	Dedicated protocol for EtherCAT
Modulation	Base band
Baud rate	100 Mbps
Physical layer	100BASE-TX (IEEE802.3)
Connectors	RJ45 shielded connector × 2 CN IN: EtherCAT input CN OUT: EtherCAT output
Communications media	Category 5 or higher (cable with double, aluminum tape and braided shielding is recommended.)
Communications distance	Distance between nodes (slaves): 100 m max.
Noise resistance	Conforms to IEC 61000-4-4, 1 kV or higher
Node address setting method	Set with decimal rotary switch or Sysmac Studio
Node address range	1 to 99: Set with rotary switch 1 to 65535: Set with Sysmac Studio
LED display	PWR × 1 L/A IN (Link/Activity IN) × 1 L/A OUT (Link/Activity OUT) × 1 RUN × 1 ERR × 1
Process data	Fixed PDO mapping
PDO size/mode	2 bits to 256 bytes
Mailbox	Emergency messages, SDO requests, SDO responses and SDO information
SYNCHRONIZATION mode	Digital I/O slave unit and analog I/O slave unit: Free Run mode (asynchronous) Encoder input slave unit: DC mode 1

Digital I/O

16-point input (1-wire connection)

Item	Specification	
	GX-ID1611	GX-ID1621
Input capacity	16 points	
Internal I/O common	NPN	PNP
ON voltage	15 VDC min. (between each input terminal and the V terminal)	15 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)
OFF current	1.0 mA max.	
Input current	6.0 mA max./input (at 24 VDC) 3.0 mA max./input (at 17 VDC)	
ON delay	0.1 ms max.	
OFF delay	0.2 ms max.	
Input filter value	Without filter, 0.5 ms, 1 ms, 2 ms, 4 ms, 8 ms, 16 ms, 32 ms (Default setting: 1 ms)	
Number of circuits per common	16 points/common	
Input indicators	LED display (yellow)	
Isolation method	Photocoupler isolation	
I/O power supply method	Supply by I/O power supply	
Unit power supply current consumption	90 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
I/O power supply current consumption	5 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Weight	180 g max.	
Expansion functions	Enabled	
Short-circuit protection function	No	

Note: For the I/O power supply current value to V and G terminals, refer to GX Series Operation Manual (Cat. No. W488)..

16-point output (1-wire connection)

Item	Specification	
	GX-OD1611	GX-OD1621
Output capacity	16 points	
Rated current (ON current)	0.5 A/output, 4.0 A/common	
Internal I/O common	NPN	PNP
Residual voltage	1.2 V max. (0.5 VDC, between each output terminal and the G terminal)	1.2 V max. (0.5 VDC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.	
ON delay	0.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	16 points/common	
Output indicators	LED display (yellow)	
Isolation method	Photocoupler isolation	
I/O power supply method	Supply by I/O power supply	
Unit power supply current consumption	90 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
I/O power supply current consumption	5 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Weight	180 g max.	
Expansion functions	Enabled	
Output handling for communications errors	Select either hold or clear	
Short-circuit protection function	No	

Note: For the I/O power supply current value to V and G terminals, refer to GX Series Operation Manual (Cat. No. W488).

16 relay outputs

Item	Specification	
	GX-OC1601	
Output capacity	16 points	
Mounted relays	NY-5W-K-IE (Fujitsu Component) (See Note)	
Rated load	Resistance load 250 VAC, 2 A/output, common 8 A 30 VDC, 2 A/output, common 8 A	
Rated ON current	3 A/output	
Maximum contact voltage	250 VAC, 125 VDC	
Maximum contact current	3 A/output	
Maximum switching capacity	750 VAAC, 90 WDC	
Minimum applicable load (reference value)	5 VDC, 1 mA	
Mechanical service life	20,000,000 operations min.	
Electrical service life	100,000 operations min.	
Number of circuits per common	16 points/common	
Output indicators	LED display (yellow)	
Isolation method	Relay isolation	
I/O power supply method	The relay drive power is supplied from the unit power supply.	
Unit power supply current consumption	210 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Weight	290 g max.	
Expansion functions	Enabled	

Item	Specification
	GX-OC1601
Output handling for communications errors	Select either hold or clear
Short-circuit protection function	No

Note: For the specification of individual relay, refer to the datasheet of published by manufacturers.

8-point input and 8-point output (1-wire connection)

Item	Specification	
	GX-MD1611	GX-MD1621
General Specifications		
Internal I/O common	NPN	PNP
I/O indicators	LED display (yellow)	
Unit power supply current consumption	80 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Weight	190 g max.	
Expansion functions	No	
Short-circuit protective function	No	
Input Section		
Input capacity	8 points	
ON voltage	15 VDC min. (between each input terminal and the V terminal)	15 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)
OFF current	1.0 mA max.	
Input current	6.0 mA max./input (at 24 VDC) 3.0 mA max./input (at 17 VDC)	
ON delay	0.1 ms max.	
OFF delay	0.2 ms max.	
Input filter value	Without filter, 0.5 ms, 1 ms, 2 ms, 4 ms, 8 ms, 16 ms, 32 ms (Default setting: 1 ms)	
Number of circuits per common	8 points/common	
Isolation method	Photocoupler isolation	
I/O power supply method	Supply by I/O power supply	
I/O power supply current consumption	5 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Output Section		
Output capacity	8 points	
Rated output current	0.5 A/output, 2.0 A/common	
Residual voltage	1.2 V max. (0.5 VDC, between each output terminal and the G terminal)	1.2 V max. (0.5 VDC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.	
ON delay	0.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	8 points/common	
Isolation method	Photocoupler isolation	
I/O power supply method	Supply by I/O power supply	
I/O power supply current consumption	5 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Output handling for communications errors	Select either hold or clear	

Note: For the I/O power supply current value to V and G terminals, refer to GX Series Operation Manual (Cat. No. W488).

16-point input (3-wire connection)

Item	Specification	
	GX-ID1612	GX-ID1622
Input capacity	16 points	
Internal I/O common	NPN	PNP
ON voltage	15 VDC min. (between each input terminal and the V terminal)	15 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)
OFF current	1.0 mA max.	
Input current	6.0 mA max./input (at 24 VDC) 3.0 mA max./input (at 17 VDC)	
ON delay	0.1 ms max.	
OFF delay	0.2 ms max.	
Input filter value	Without filter, 0.5 ms, 1 ms, 2 ms, 4 ms, 8 ms, 16 ms, 32 ms (Default setting: 1 ms)	
Number of circuits per common	8 points/common	
Input indicators	LED display (yellow)	
Isolation method	Photocoupler isolation	
I/O power supply method	Supply by I/O power supply	
Input device supply current	100 mA/point	
Unit power supply current consumption	90 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
I/O power supply current consumption	5 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Weight	370 g max.	
Expansion functions	No	
Short-circuit protection function	No	

Note: For the I/O power supply current value to V and G terminals, refer to GX Series Operation Manual (Cat. No. W488).

16-point output (3-wire connection)

Item	Specification	
	GX-OD1612	GX-OD1622
Output capacity	16 points	
Rated current (ON current)	0.5 A/output, 4.0 A/common	
Internal I/O common	NPN	PNP
Residual voltage	1.2 V max. (0.5 VDC, between each output terminal and the G terminal)	1.2 V max. (0.5 VDC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.	
ON delay	0.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	8 points/common	
Output indicators	LED display (yellow)	
Isolation method	Photocoupler isolation	
I/O power supply method	Supply by I/O power supply	
Output device supply current	100 mA/point	
Unit power supply current consumption	90 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
I/O power supply current consumption	5 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Weight	370 g max.	
Expansion functions	No	
Output handling for communications errors	Select either hold or clear	
Short-circuit protection function	No	

Note: For the I/O power supply current value to V and G terminals, refer to GX Series Operation Manual (Cat. No. W488).

8-point input and 8-point output (3-wire connection)

Item	Specification	
	GX-MD1612	GX-MD1622
General Specifications		
Internal I/O common	NPN	PNP
I/O indicators	LED display (yellow)	
Unit power supply current consumption	90 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Weight	370 g max.	
Expansion functions	No	
Short-circuit protective function	No	
Input Section		
Input capacity	8 points	
ON voltage	15 VDC min. (between each input terminal and the V terminal)	15 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)
OFF current	1.0 mA max.	
Input current	6.0 mA max./input (at 24-VDC) 3.0 mA max./input (at 17-VDC)	
ON delay	0.1 ms max.	
OFF delay	0.2 ms max.	
Input filter value	Without filter, 0.5 ms, 1 ms, 2 ms, 4 ms, 8 ms, 16 ms, 32 ms (Default setting: 1 ms)	
Number of circuits per common	8 points/common	
Isolation method	Photocoupler isolation	
I/O power supply method	Supply by I/O power supply	
Input device supply current	100 mA/point	
I/O power supply current consumption	5 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Output Section		
Output capacity	8 points	
Rated output current	0.5 A/output, 2.0 A/common	
Residual voltage	1.2 V max. (0.5 VDC, between each output terminal and the G terminal)	1.2 V max. (0.5 VDC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.	
ON delay	0.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	8 points/common	
Isolation method	Photocoupler isolation	
I/O power supply method	Supply by I/O power supply	
Output device supply current	100 mA/point	
I/O power supply current consumption	5 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Output handling for communications errors	Select either hold or clear	

Note: For the I/O power supply current value to V and G terminals, refer to GX Series Operation Manual (Cat. No. W488).

Analog I/O

Analogue input

Item	Specification		
	GX-AD0471		
	Voltage input		Current input
Input capacity	4 points (possible to set number of enabled channels)		
Input range	0 to 5 V 1 to 5 V 0 to 10 V -10 to +10 V		4 to 20 mA
Input range setting method	Input range switch: Common to input CH1/CH2, common to input CH3/CH4 SDO communication: Possible to set input CH1 to CH4 individually		
Maximum signal input	±15 V		±30 mA
Input impedance	1 MΩ min.		Approx. 250 Ω
Resolution	1/8000 (full scale)		
Overall accuracy	25°C	±0.3% FS	±0.4% FS
	-10 to 55°C	±0.6% FS	±0.8% FS
Analog conversion cycle	500 μs/input when 4 points are used: 2 ms max.		
A/D converted data	Other than ±10 V: 0000 to 1F40 Hex full scale (0 to 8000) ±10 V: F060 to 0FA0 Hex full scale (-4000 to +4000) A/D conversion range: ±5% FS of the above data ranges.		
Isolation method	Photocoupler isolation (between input and communications lines) No isolation between input signals		
Unit power supply current consumption	120 mA max. (for 20.4 to 26.4 VDC power supply voltage)		
Weight	180 g max.		
Accessories	Four short-circuit metal fixtures (for current input) ^{*1}		

*1 Short-circuit metal fixtures are used for current input only, but store in a safe place when using for voltage inputs as well.

Analogue output

Item	Specification		
	GX-DA0271		
	Voltage output		Current output
Output capacity	2 points (possible to set number of enabled channels)		
Output range	0 to 5 V 1 to 5 V 0 to 10 V -10 to +10 V		4 to 20 mA
Output range setting method	Output range switch, SDO communication: Possible to set outputs CH1 and CH2 separately		
External output allowable load resistance	5 KΩ min.		600 Ω max.
Resolution	1/8000 (full scale)		
Overall accuracy	25°C	±0.4% FS	
	-10 to 55°C	±0.8% FS	
Analog conversion cycle	500 μs/input when 2 points are used: 1 ms max.		
D/A converted data	Other than ±10 V: 0000 to 1F40 Hex full scale (0 to 8000) ±10 V: F060 to 0FA0 Hex full scale (-4000 to +4000) D/A conversion range: ±5% FS of the above data ranges.		
Isolation method	Photocoupler isolation (between output and communications lines) No isolation between output signals		
Unit power supply current consumption	150 mA max. (for 20.4 to 26.4 VDC power supply voltage)		
Weight	190 g max.		

Encoder Input

Open collector input

Item	Specification			
	GX-EC0211			
	Terminal specifications			
Counter point	2 points			
Input signal	Counter phase A Counter phase B Counter phase Z Latch input (A/B) Counter reset input			
Counter enabled status display	LED display (green)			
Input indicators	LED display (yellow)			
Unit power supply current consumption	130 mA max. (for 20.4 to 26.4 VDC power supply voltage)			
Weight	390 g max.			
	Pulse input specifications			
	Counter phase A/B		Counter phase Z	
Input voltage	20.4 to 26.4 VDC (24 VDC -15 to +10%)	4.5 to 5.5 VDC (5 VDC ±5%)	20.4 to 26.4 VDC (24 VDC -15 to +10%)	4.5 to 5.5 VDC (5 VDC ±5%)
Input current	8.4 mA (at 24 VDC)	8.6 mA (at 5 VDC)	8.4 mA (at 24 VDC)	8.6 mA (at 5 VDC)
ON voltage	19.6 V min.	4.5 V min.	18.6 V min.	4.5 V min.
OFF voltage	4 V max.	1.5 V max.	4 V max.	1.5 V max.

Item	Specification			
	GX-EC0211			
Input restriction resistance	2.7 KΩ	430 Ω	2.7 KΩ	430 Ω
Maximum response frequency	Single phase 500 kHz (phase difference Multiplication × 4, 125 kHz)		125 kHz	
Filter switching	NA		NA	
Latch/reset input specifications				
	Latch input (A/B)		Reset input	
Internal I/O common	NPN			
Input voltage	20.4 to 26.4 VDC (24 VDC −15 to +10%)		20.4 to 26.4 VDC (24 VDC −15 to +10%)	
Input impedance	4.0 KΩ		3.3 KΩ	
Input current	5.5 mA (at 24 VDC)		7 mA (at 24 VDC)	
ON voltage/ON current	17.4 VDC min./3 mA min.		14.4 VDC min./3 mA min.	
OFF voltage/OFF current	5 VDC max./1 mA max.		5 VDC max./1 mA max.	
ON response time	3 μs max.		15 μs max.	
OFF response time	3 μs max.		90 μs max.	

Line Driver input

Item	Specification	
	GX-EC0241	
Terminal specifications		
Counter point	2 points	
Input signal	Counter phase A Counter phase B Counter phase Z Latch input (A/B) Counter reset input	
Counter enabled status display	LED display (green)	
Input indicators	LED display (yellow)	
Unit power supply current consumption	100 mA max. (for 20.4 to 26.4 VDC power supply voltage)	
Weight	390 g max.	
Pulse input specifications		
	Counter phase A/B	Counter phase Z
Input voltage	EIA standard RS-422-A line driver level	
Input impedance	120 Ω ±5%	
gH level input voltage	0.1 V	
gL level input voltage	−0.1 V	
Hysteresis voltage	60 mV	
Maximum response frequency	Single phase 4 MHz (phase difference Multiplication × 4, 1 MHz)	1 MHz
Filter switching	NA	
Latch/reset input specifications		
	Latch input (A/B)	Reset input
Internal I/O common	PNP	
Input voltage	20.4 to 26.4 VDC (24 VDC −15 to +10%)	20.4 to 26.4 VDC (24 VDC −15 to +10%)
Input impedance	4.0 KΩ	3.3 KΩ
Input current	5.5 mA (at 24 VDC)	7 mA (at 24 VDC)
ON voltage/ON current	17.4 VDC min./3 mA min.	14.4 VDC min./3 mA min.
OFF voltage/OFF current	5 VDC max./1 mA max.	5 VDC max./1 mA max.
ON response time	3 μs max.	15 μs max.
OFF response time	3 μs max.	90 μs max.

Expansion Units

8-point input

Item	Specification	
	XWT-ID08	XWT-ID08-1
Internal I/O common	NPN	
I/O capacity	8 inputs	
ON voltage	15 VDC min. (between each input terminal and the V terminal)	15 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)
OFF current	1.0 mA max.	
Input current	At 24 VDC: 6.0 mA max./input At 17 VDC: 3.0 mA max./input	
ON delay	1.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	8 inputs/common	
Communications power supply current consumption	5 mA	
Weight	80 g max.	

16-point input

Item	Specification	
	XWT-ID16	XWT-ID16-1
Internal I/O common	NPN	PNP
I/O capacity	16 inputs	
ON voltage	15 VDC min. (between each input terminal and the V terminal)	15 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)
OFF current	1.0 mA max.	
Input current	At 24 VDC: 6.0 mA max./input At 17 VDC: 3.0 mA max./input	
ON delay	1.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	16 inputs/common	
Communications power supply current consumption	10 mA	
Weight	120 g max.	

8-point output

Item	Specification	
	XWT-OD08	XWT-OD08-1
Internal I/O common	NPN	PNP
I/O capacity	8 outputs	
Rated output current	0.5 A/output, 2.0 A/common	
Residual voltage	1.2 V max. (0.5 A DC, between each output terminal and the G terminal)	1.2 V max. (0.5 A DC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.	
ON delay	0.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	8 outputs/common	
Communications power supply current consumption	5 mA	
Weight	80 g max.	

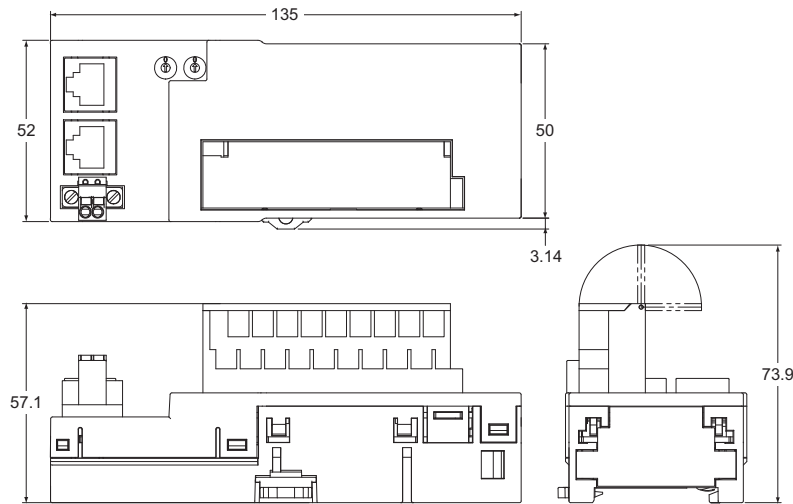
16-point output-point

Item	Specification	
	XWT-OD16	XWT-OD16-1
Internal I/O common	NPN	PNP
I/O capacity	16 outputs	
Rated output current	0.5 A/output, 4.0 A/common	
Residual voltage	1.2 V max. (0.5 A DC, between each output terminal and the G terminal)	1.2 V max. (0.5 A DC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.	
ON delay	0.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	16 outputs/common	
Communications power supply current consumption	10 mA	
Weight	120 g max.	

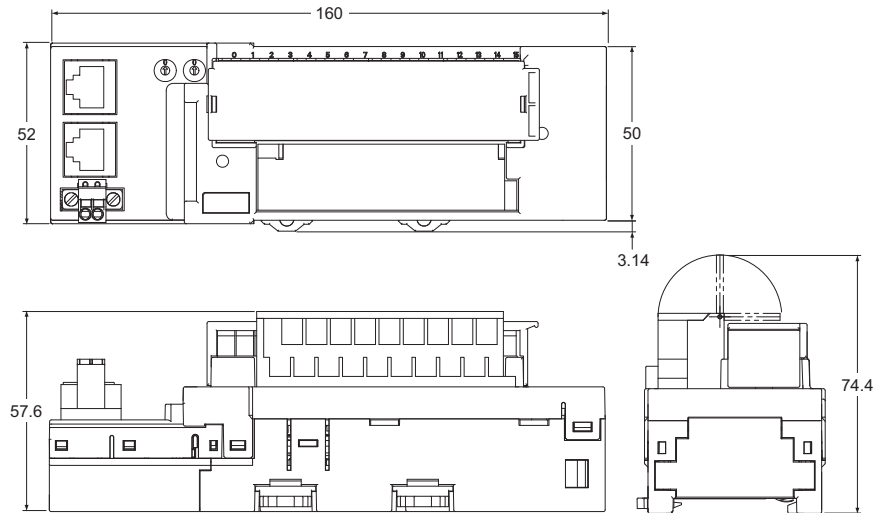
Dimensions

Digital I/O

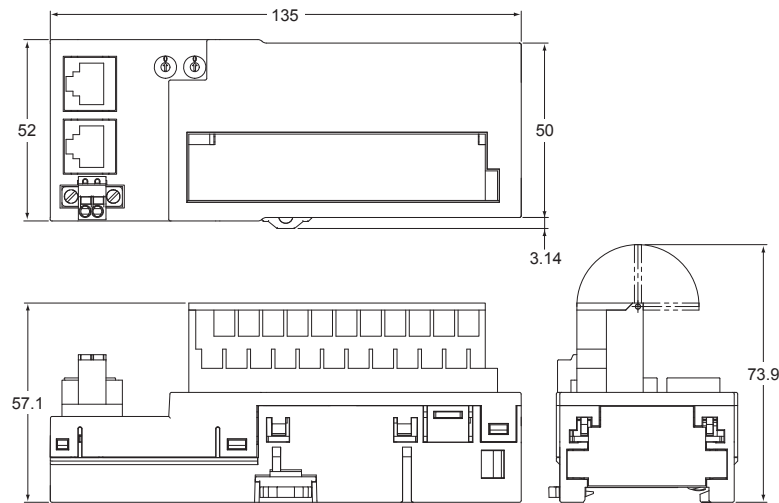
GX-ID1611/ID1621, GX-OD1611/OD1621



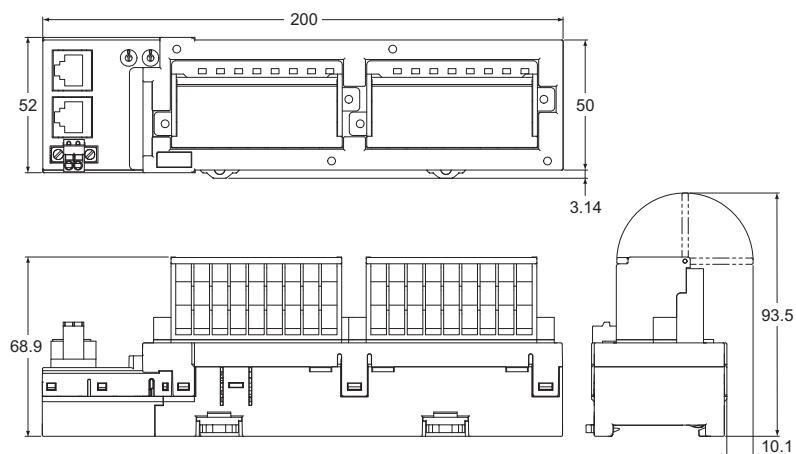
GX-OC1601



GX-MD1611/MD1621

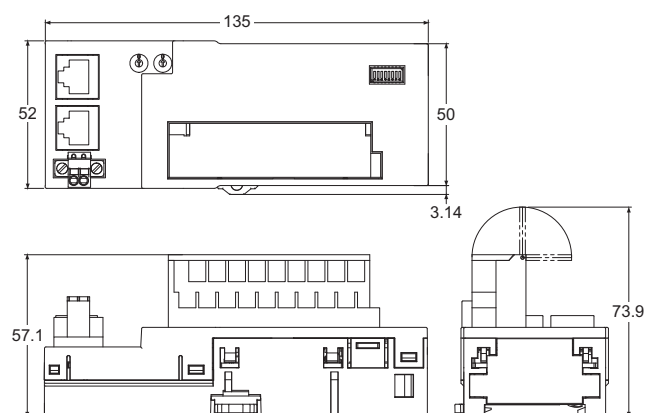


GX-ID1612/ID1622, GX-OD1612/OD1622, GX-MD1612/MD1622



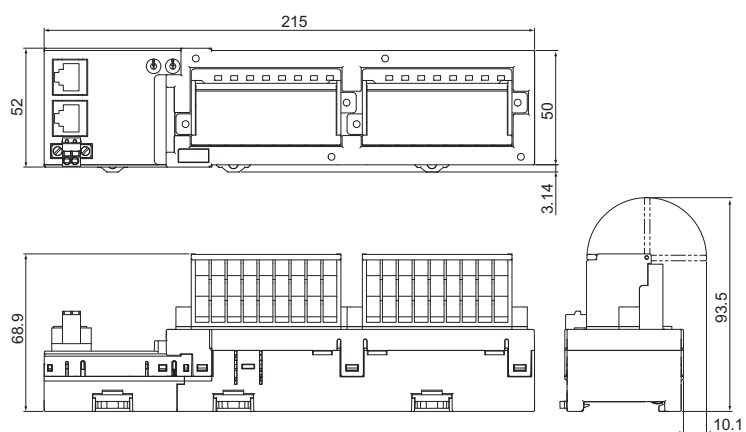
Analog I/O

GX-AD0471/DA0271



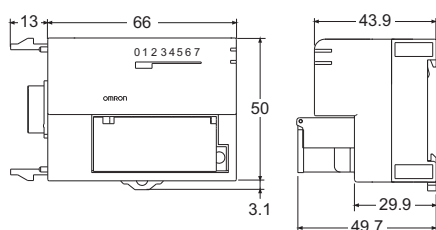
Encoder Input

GX-EC0211/EC0241

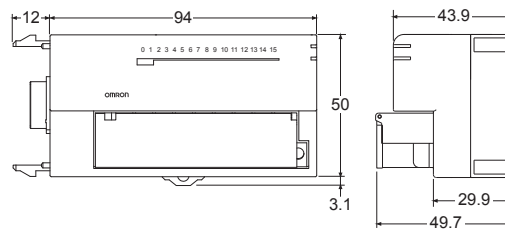


Expansion Units

XWT-ID08/ID08-1, XWT-OD08/OD08-1



XWT-ID16/ID16-1, XWT-OD16/OD16-1



Ordering information

Digital I/O

Description	Specification	Model
16-point NPN input	24 VDC, 6 mA, 1-wire connection, expandable with one XWT unit	GX-ID1611
16-point PNP input	24 VDC, 6 mA, 1-wire connection, expandable with one XWT unit	GX-ID1621
16-point NPN output	24 VDC, 500 mA, 1-wire connection, expandable with one XWT unit	GX-OD1611
16-point PNP output	24 VDC, 500 mA, 1-wire connection, expandable with one XWT unit	GX-OD1621
8-point input and 8-point output, NPN	24 VDC, 6 mA input, 500 mA output, 1-wire connection	GX-MD1611
8-point input and 8-point output, PNP	24 VDC, 6 mA input, 500 mA output, 1-wire connection	GX-MD1621
16-point NPN input	24 VDC, 6 mA, 3-wire connection	GX-ID1612
16-point PNP input	24 VDC, 6 mA, 3-wire connection	GX-ID1622
16-point NPN output	24 VDC, 500 mA, 3-wire connection	GX-OD1612
16-point PNP output	24 VDC, 500 mA, 3-wire connection	GX-OD1622
8-point input and 8-point output, NPN	24 VDC, 6 mA input, 500 mA output, 3-wire connection	GX-MD1612
8-point input and 8-point output, PNP	24 VDC, 6 mA input, 500 mA output, 3-wire connection	GX-MD1622
16-point relay output	250 VAC, 2 A, 1-wire connection, expandable with one XWT unit	GX-OC1601

Analog I/O

Description	Specification	Model
4-Channel analogue input, current/voltage	10 V, 0 to 10 V, 0 to 5 V, 1 to 5 V, 4 to 20 mA	GX-AD0471
2-Channel analogue output, current/voltage	10 V, 0 to 10 V, 0 to 5 V, 1 to 5 V, 4 to 20 mA	GX-DA0271

Encoder Input

Description	Specification	Model
2 encoder open collector inputs	500 kHz Open collector input	GX-EC0211
2 encoder line-driver inputs	4 MHz Line driver input	GX-EC0241

Expansion Units

Description	Specification	Model
8-point NPN input expansion unit	24 VDC, 6 mA	XWT-ID08
8-point PNP input expansion unit	24 VDC, 6 mA	XWT-ID08-1
8-point NPN output expansion unit	24 VDC, 500 mA	XWT-OD08
8-point PNP output expansion unit	24 VDC, 500 mA	XWT-OD08-1
16-point NPN input expansion unit	24 VDC, 6 mA	XWT-ID16
16-point PNP input expansion unit	24 VDC, 6 mA	XWT-ID16-1
16-point NPN output expansion unit	24 VDC, 500 mA	XWT-OD16
16-point PNP output expansion unit	24 VDC, 500 mA	XWT-OD16-1

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. SysCat_P21E-EN-01B In the interest of product improvement, specifications are subject to change without notice.