
FnIO G – Series :

GT-2418

GT-2418(8 Points, Sink Output With Diagnostics, 24Vdc/0.5A)

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History

REV.	PAGES	REMARKS	DATE	Editor
Preliminary		Preliminary	May 27, 2019	Seokhyun, Jun
1.01	4,5	Shock, Vibration specification changed General specification added(UL)	04.20.2020	JY BAE
1.02	6	Changed Diagram / Signal Description / Channel to Point	Apr 03, 2023	Soyeong, Park

1. ENVIRONMENT SPECIFICATION

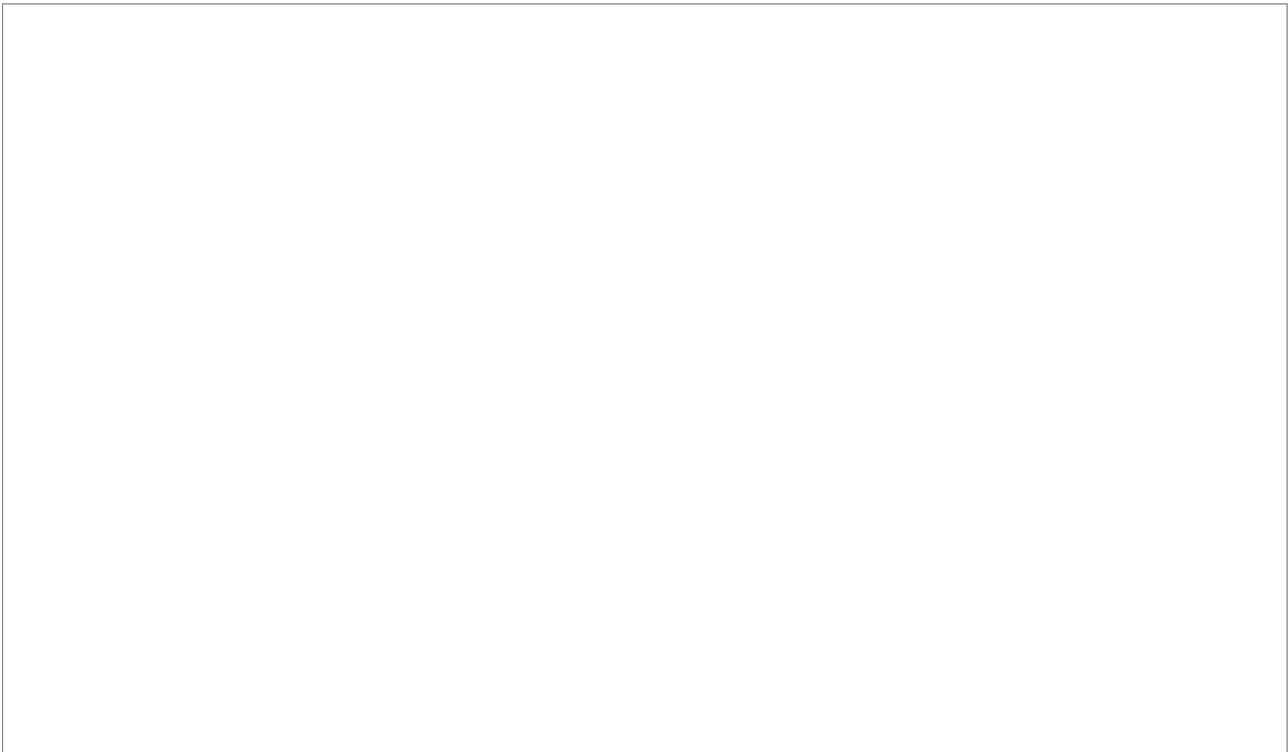
Environmental specification	
Operating Temperature	-40°C ~60°C
UL Temperature	-20°C ~60°C
Storage Temperature	-40°C ~85°C
Relative Humidity	5% ~ 90% non-condensing
Mounting	DIN rail
General specification	
Shock Operating	IEC 60068-2-27 : 2008/15g, 11ms
Vibration Resistance	Based on IEC 60068-2-6 DNVGL-CG-0039 : 2016/6 Vibration Class B, 4g
Industrial Emissions	EN 61000-6-4 : 2007 +A1:2011
Industrial Immunity	EN 61000-6-2 : 2005
Installation Position	Vertical and horizontal installation is available.
Product Certifications	CE, UL

2. GT-2418 (8 Points Sink Output with Diagnostics)

2.1. GT-2418 Specification

Items	Specification
Output specification	
Outputs per module	8 points sink type
Indicators	8 green output state, 8 red diagnostic state
Output voltage range	24Vdc nominal 15Vdc ~ 30Vdc @ 60°C
On-state voltage drop	Max. 0.3Vdc @ 25°C Max. 0.5Vdc @ 60°C
On-state min. current	Min. 1mA
Off-state leakage current	Max. 20uA
Output signal delay	OFF to ON : Max. 0.3ms ON to OFF : Max. 0.4ms
Output current rating	Max. 0.5A per channel / Max. 4A per unit
Protection	Over current limit: Min. 3.5A@ 25°C per each channels Thermal shutdown : 175°C Short circuit protection
Common type	8 points / 2 COM
General specification	
Power dissipation	Max. 55mA @ 5Vdc
Isolation	I/O to Logic : photocoupler isolation Field power : non-isolation
UL field power	Supply voltage : 24Vdc nominal, Class 2
Field power	Supply voltage : 24Vdc nominal Voltage range : 15~30Vdc Power dissipation: 30mA @ 24Vdc
Wiring	I/O Cable Max. 0.75mm ² (AWG 18)
Weight	63g
Module size	12mm x 109mm x 70mm
Environment condition	Refer to 'Environment Specification'

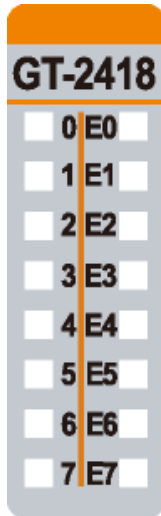
2.2. GT-2418 Wiring Diagram



Pin No.	Signal Description
0	Output Channel 0
1	Common (Field Power 24V)
2	Output Channel 1
3	Common (Field Power 24V)
4	Output Channel 2
5	Common (Field Power 24V)
6	Output Channel 3
7	Common (Field Power 24V)
8	Output Channel 4
9	Common (Field Power 24V)
10	Output Channel 5
11	Common (Field Power 24V)
12	Output Channel 6
13	Common (Field Power 24V)
14	Output Channel 7
15	Common (Field Power 24V)
16	Field Power 0V
17	Common (Field Power 24V)

2.3. GT-2418 LED Indicator

2.3.1. LED Indicator



LED No.	LED Function / Description	LED Color
0	OUTPUT Channel 0	Green
1	OUTPUT Channel 1	Green
2	OUTPUT Channel 2	Green
3	OUTPUT Channel 3	Green
4	OUTPUT Channel 4	Green
5	OUTPUT Channel 5	Green
6	OUTPUT Channel 6	Green
7	OUTPUT Channel 7	Green
E0	Channel 0 Diagnostic	Red
E1	Channel 0 Diagnostic	Red
E2	Channel 0 Diagnostic	Red
E3	Channel 0 Diagnostic	Red
E4	Channel 0 Diagnostic	Red
E5	Channel 0 Diagnostic	Red
E6	Channel 0 Diagnostic	Red
E7	Channel 0 Diagnostic	Red

2.3.2. Channel Status LED

- LED No. 0~7

Status	LED	To indicate
Not Signal	Off	Normal Operation
On Signal	Green	Normal Operation

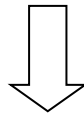
- LED No. E0~E7

Status	LED	To indicate
Bus Fault	Red (All)	G-Bus Fault
Channel Fault	Red	Field Power Off
		Short to VCC
		Overtemperature
		Current Limitation

2.4. Mapping data into the image table

- **Output Image Value**

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte 0	D7	D6	D5	D4	D3	D2	D1	D0

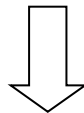


- **Output Module Data**

D7	D6	D5	D4	D3	D2	D1	D0
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- **Input Module Data**

D7	D6	D5	D4	D3	D2	D1	D0
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- **Input Image Value**

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte0	D7	D6	D5	D4	D3	D2	D1	D0

2.5. Parameter Data

- Valid Parameter length: 2 Bytes
- Parameter Data

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte0	Fault Action (ch0~ch7) 0: Fault value, 1:Hold last state							
Byte1	Fault value (ch0~ch7) 0:Off, 1:On							