

# **FnIO G – Series :**

## ***GT-225F***

***GT-225F(16 Points, Sink Output Terminal, 24Vdc/0.3A)***

# Specification

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# Specification

## History

REV.	PAGES	REMARKS	DATE	Editor
1.00	9		16.10.2017	Kim Hong Seok
1.02		Specification Revision	04.12.2018	Seokhyun, Jun
1.03	4,5	Shock, Vibration specification changed General specification added(UL)	04.20.2020	JY BAE
1.04	6	Changed Diagram / Channel to Point	Apr 03, 2023	Soyeong, Park

# Specification

## 1. ENVIRONMENT SPECIFICATION

<b>Environmental specification</b>	
Operation Temperature	-40°C ~70°C
UL Temperature	-20°C ~60°C
Storage Temperature	-40°C ~85°C
Relative Humidity	5%~90% Non-condensing
Mounting	DIN Rail
<b>General specification</b>	
Shock Operating	IEC 60068-2-27
Vibration Resistance	Based on IEC 60068-2-6 DNVGL-CG-0039 : Vibration Class B, 4g
Industrial Emissions	EN61000-6-4/All : 2011
Industrial Immunity	EN 61000-6-2 : 2005
Installation Position	Vertical and horizontal installation is available
Product Certifications	CE, UL, FCC

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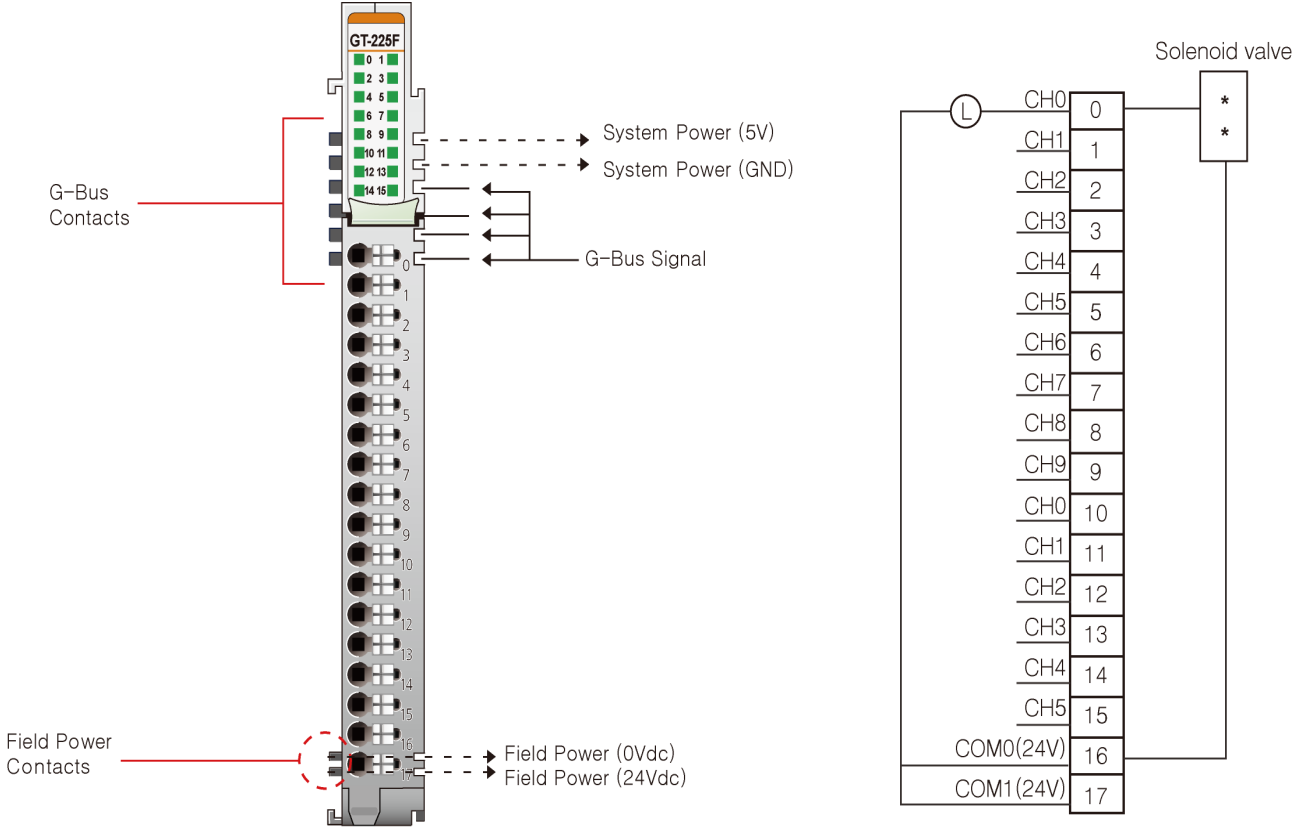
## 2. GT-225F (16 Points Sink Output Terminal)

### 2.1. GT-225F Specification

Items	Specification
<b>Input specification</b>	
Output per module	16 points sink type
Indicators	16 green output status
Output voltage range	24Vdc nominal 15Vdc ~ 30Vdc @ 70°C
On-state voltage drop	0.3Vdc @ 25°C 0.5Vdc @ 70°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. 0.5ms
Output current rating	Max. 0.3A per channel / Max. 4.8A per unit
Protection	Over current limit: Min. 3.5A@ 25°C per each channels Thermal shutdown : Min 3A@ 25°C per each channels Short circuit protection
Common type	16 points / 2 COM
<b>General specification</b>	
Power dissipation	Max. 50mA @ 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
Single Wiring	I/O Cable Max. 0.75mm <sup>2</sup> (AWG 18)
Weight	63g
Module size	12mm x 109mm x 70mm
<b>Environment condition</b>	<b>Refer to '1. Environment Specification'</b>

# Specification

## 2.2. GT-225F Wiring Diagram

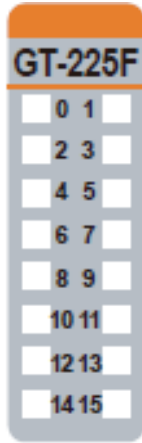


Pin No.	Signal Description	Signal Description	Pin No.
0	Output Channel 0	Output Channel 1	1
2	Output Channel 2	Output Channel 3	3
4	Output Channel 4	Output Channel 5	5
6	Output Channel 6	Output Channel 7	7
8	Output Channel 8	Output Channel 9	9
10	Output Channel 10	Output Channel 11	11
12	Output Channel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

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## 2.3. GT-225F 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
8	OUTPUT Channel 8	Green
9	OUTPUT Channel 9	Green
10	OUTPUT Channel 10	Green
11	OUTPUT Channel 11	Green
12	OUTPUT Channel 12	Green
13	OUTPUT Channel 13	Green
14	OUTPUT Channel 14	Green
15	OUTPUT Channel 15	Green

### 2.3.2. Channel Status LED

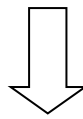
Status	LED	To indicate
Not Signal	Off	Normal Operation
On Signal	Green	Normal Operation

# Specification

## 2.4. Mapping data into the image table

- **Output Image Value**

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
<b>Byte0</b>	D7	D6	D5	D4	D3	D2	D1	D0
<b>Byte1</b>	D15	D14	D13	D12	D11	D10	D9	D8



- **Output Module Data**

D7	D6	D5	D4	D3	D2	D1	D0
D15	D14	D13	D12	D11	D10	D9	D8



# Specification

## 2.5. Parameter Data

- **Valid Parameter length: 4 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 Action (ch8~ch15) 0: Fault value, 1:Hold last state							
Byte2	Fault value (ch0~ch7) 0:Off, 1:On							
Byte3	Fault value (ch8~ch15) 0:Off, 1:On							