

FnIO G – Series :

GT-222F

GT-222F (16 Points, Source Output Terminal, 24Vdc, 0.3A)

Specification

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History

| Rev | Pages | Remarks | Date | Editor |
|------|-------|---|------------|---------------|
| 1.00 | | | 2014/03/06 | Woohyeun, Cho |
| 1.01 | 4,5 | Changed Environmental Spec, General Spec, Image | 2016/06/03 | Joonho, Park |
| 1.02 | 5 | Field Power dissipation | 2017/03/31 | Hongseok, Kim |
| 1.03 | | Edit typos | 2017/07/17 | Hongseok, Kim |
| 1.04 | 4,5 | Shock, Vibration specification changed General specification added(UL) | 2020/04/20 | Juyong, Bae |
| 1.05 | 6 | Change Diagram, Signal Description, Channel to Point | 2023/04/03 | Soyeong, Park |
| 1.06 | 4,6,7 | Edit Certification / Change Diagram, Status LED | 2023/08/04 | Suna, Hwang |
| | | | | |

Specification

1. ENVIRONMENT SPECIFICATION

| Environmental specification | |
|-----------------------------|---|
| 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 |
| General specification | |
| Shock Operating | IEC 60068-2-27 |
| Vibration Resistance | Based on IEC 60068-2-6, 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 |

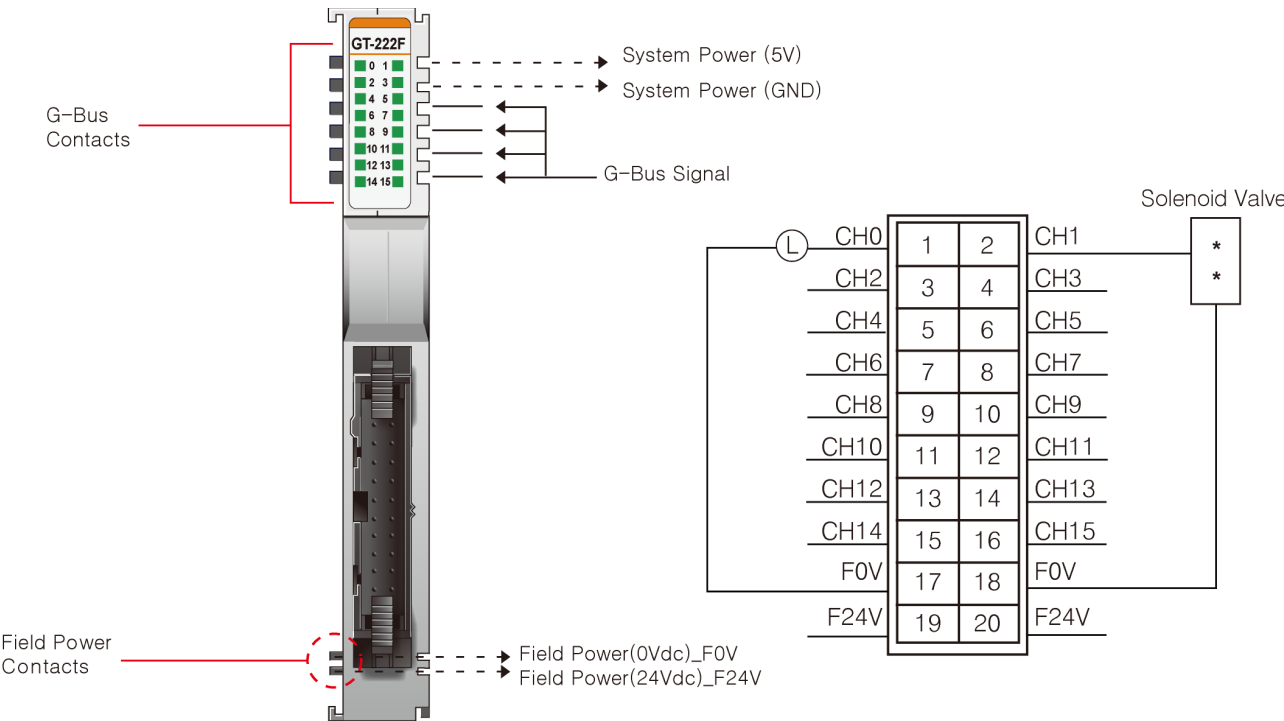
Specification

2. GT-222F (16 Points, Source Output Terminal)

2.1. GT-222F Specification

| Items | Specification |
|------------------------------|--|
| Input Specification | |
| Output per module | 16 points source type |
| Indicators | 16 green output status |
| Output voltage range | Nominal 24Vdc 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. 5uA |
| Output signal delay | OFF to ON : Max. 0.3ms ON to OFF : Max. 0.3ms |
| Output current rating | Max. 0.3A per channel / Max. 3.6A per unit |
| Protection | Over current limit : Min 6.5A @ 25°C per each channels Thermal shutdown : Min 4A @ 25°C per each channels Short circuit protection |
| Common type | 16 points / 2 COM |
| General specification | |
| 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: 20mA @ 24Vdc |
| Wiring | According to the Herose connector specification Module Connector :HIF3BA-20PA-2.54DSA |
| Weight | 52g |
| Module size | 12mm x 99mm x 70mm |
| Environment condition | Refer to '1. Environment Specification' |

2.2. GT-222F Wiring Diagram

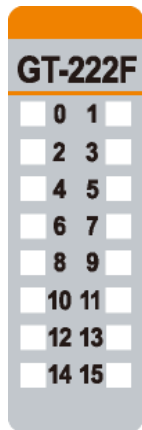


| Pin No. | Signal Description | Signal Description | Pin No. |
|---------|-------------------------|-------------------------|---------|
| 1 | Output Channel 0 | Output Channel 1 | 2 |
| 3 | Output Channel 2 | Output Channel 3 | 4 |
| 5 | Output Channel 4 | Output Channel 5 | 6 |
| 7 | Output Channel 6 | Output Channel 7 | 8 |
| 9 | Output Channel 8 | Output Channel 9 | 10 |
| 11 | Output Channel 10 | Output Channel 11 | 12 |
| 13 | Output Channel 12 | Output Channel 13 | 14 |
| 15 | Output Channel 14 | Output Channel 15 | 16 |
| 17 | Common (Field Power 0V) | Common (Field Power 0V) | 18 |
| 19 | Field Power 24V | Field Power 24V | 20 |

Specification

2.3. GT-222F 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 |

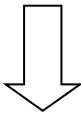
2.3.2. Channel Status LED

| Status | LED | To indicate |
|-----------|-------|------------------------|
| No Signal | Off | No Output Signal |
| On Signal | Green | Output Signal detected |

2.4. Mapping data into the image table

● Output Image Value

| Bit No | Bit7 | Bit6 | Bit5 | Bit4 | Bit3 | Bit2 | Bit1 | Bit0 |
|--------|------|------|------|------|------|------|------|------|
| Byte0 | D7 | D6 | D5 | D4 | D3 | D2 | D1 | D0 |
| Byte1 | 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 |

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 | | | | | | | |