
FnIO G – Series :

GT-22BA

GT-22BA (32 Points, Sink Output Terminal, 24Vdc, 0.3A)

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Specification

History

Rev	Pages	Remarks	Date	Editor
1.00			2016/05/17	Hongseok, Kim
1.01	4,5	4p : Environmnetal Spec. is changed 5p : All channel output is added.	2016/06/03	Jinhyun, Hong
1.02	5	Field Power dissipation	2017/03/31	Hongseok, Kim
1.03	4,5	Shock, Vibration specification changed General specification added(UL)	2020/04/20	Juyong, Bae
1.04	6	Change Diagram, Signal Description	2023/04/03	Soyeong, Park
1.05	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

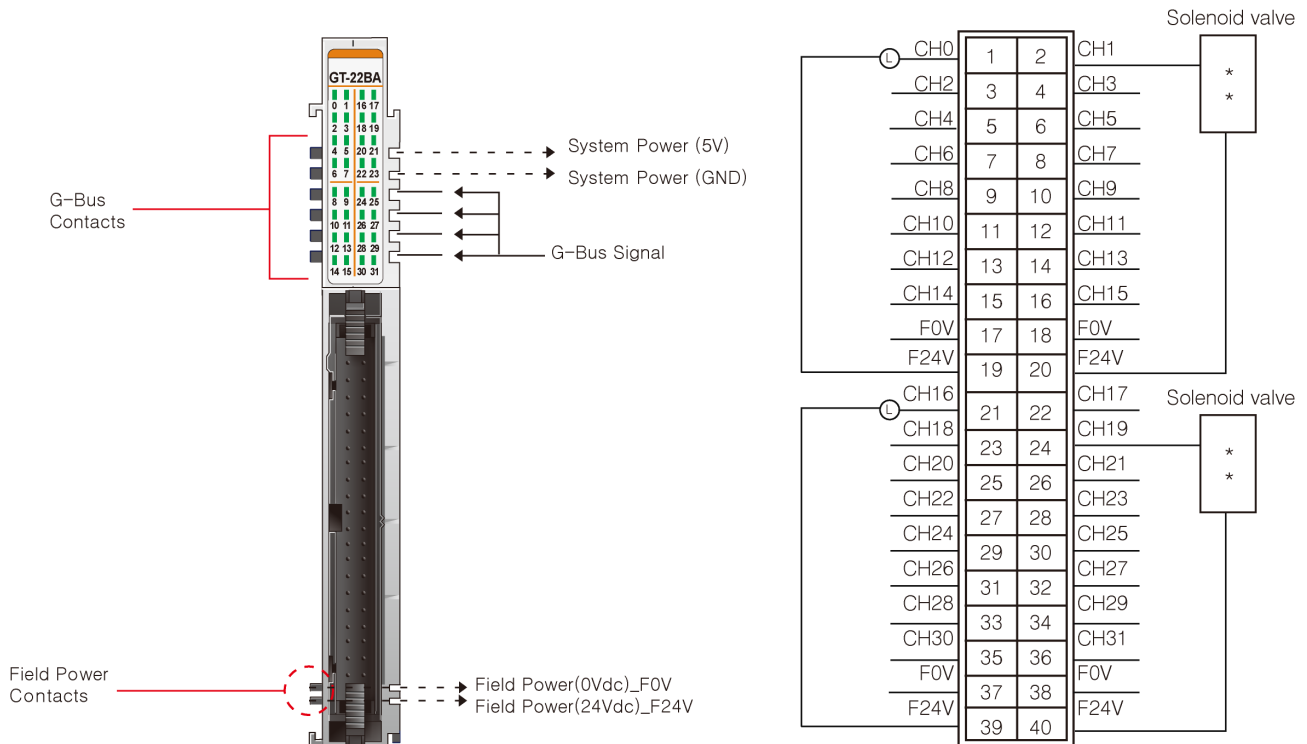
Specification

2. GT-22BA (32 Points, Sink Output Terminal, 24Vdc, 0.3A)

2.1. GT-22BA Specification

Items	Specification
Output Specification	
Output per module	32 points sink type
Indicators	32 green output status
Output voltage range	24Vdc nominal 15Vdc ~ 30Vdc @ 60°C
On-state voltage drop	0.3Vdc @ 25°C 0.5Vdc @ 60°C
On-state min. current	Min. 1mA
Off-state leakage current	Max. 25uA
Output signal delay	OFF to ON : Max. 0.3ms ON to OFF : Max. 0.5ms
Output current rating	0.3A per channel / Max. 6.0A 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	32 points / 8 COM
General Specification	
Power dissipation	Max. 65mA @ 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	According to the Herose connector specification Module Connector :HIF3BA-40PA-2.54DSA
Weight	59g
Module size	12mm x 109mm x 70mm
Environment condition	Refer to '1. Environment Specification'

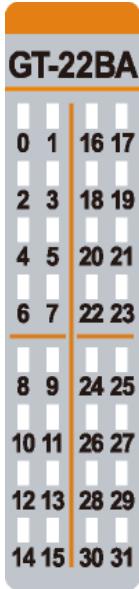
2.2. GT-22BA Wiring Diagram



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	Field Power 0V(F0V)	Field Power 0V(F0V)	18
19	Field Power 24V(F24V)	Field Power 24V(F24V)	20
21	Output Channel 16	Output Channel 17	22
23	Output Channel 18	Output Channel 19	24
25	Output Channel 20	Output Channel 21	26
27	Output Channel 22	Output Channel 23	28
29	Output Channel 24	Output Channel 25	30
31	Output Channel 26	Output Channel 27	32
33	Output Channel 28	Output Channel 29	34
35	Output Channel 30	Output Channel 31	36
37	Field Power 0V(F0V)	Field Power 0V(F0V)	38
39	Field Power 24V(F24V)	Field Power 24V(F24V)	40

2.3. GT-22BA 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
...
31	OUTPUT Channel 31	Green

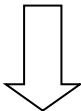
2.3.2. Channel Status LED

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
Byte2	D23	D22	D21	D20	D19	D18	D17	D16
Byte3	D31	D30	D29	D28	D27	D26	D25	D24



● Output Module Data

D7	D6	D5	D4	D3	D2	D1	D0
D15	D14	D13	D12	D11	D10	D9	D8
D23	D22	D21	D20	D19	D18	D17	D16
D31	D30	D29	D28	D27	D26	D25	D24

2.5. Parameter Data

- Valid Parameter length : 8 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 Action (ch16~ch23) 0: Fault value, 1:Hold last state							
Byte3	Fault Action (ch24~ch31) 0: Fault value, 1:Hold last state							
Byte4	Fault value (ch0~ch7)				0:Off, 1:On			
Byte5	Fault value (ch8~ch15)				0:Off, 1:On			
Byte6	Fault value (ch16~ch23)				0:Off, 1:On			
Byte7	Fault value (ch24~ch31)				0:Off, 1:On			