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# **FnIO G – Series :**

## ***GT-1238***

***GT-1238 (8 Points, Universal Input Terminal, 24Vdc)***

# Specification

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History

Rev	Pages	Remarks	Date	Editor
1.00			2016/03/25	Joonho, Park
1.03		Environment Specification	2016/06/03	Dohoon, Lee
1.05		Add missing content	2017/07/17	Hongseok, Kim
1.06		Input specification changed	2020/02/06	Seokhyun, Jun
1.07	4,5	Shock, Vibration specification changed General specification added(UL)	2020/04/20	Joonho, Park
1.08	6	Change Diagram, Channel to Point	2023/03/30	Soyeong, Park
1.09	4,6,7	Edit Certification / Change Diagram, Status LED	2023/08/08	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

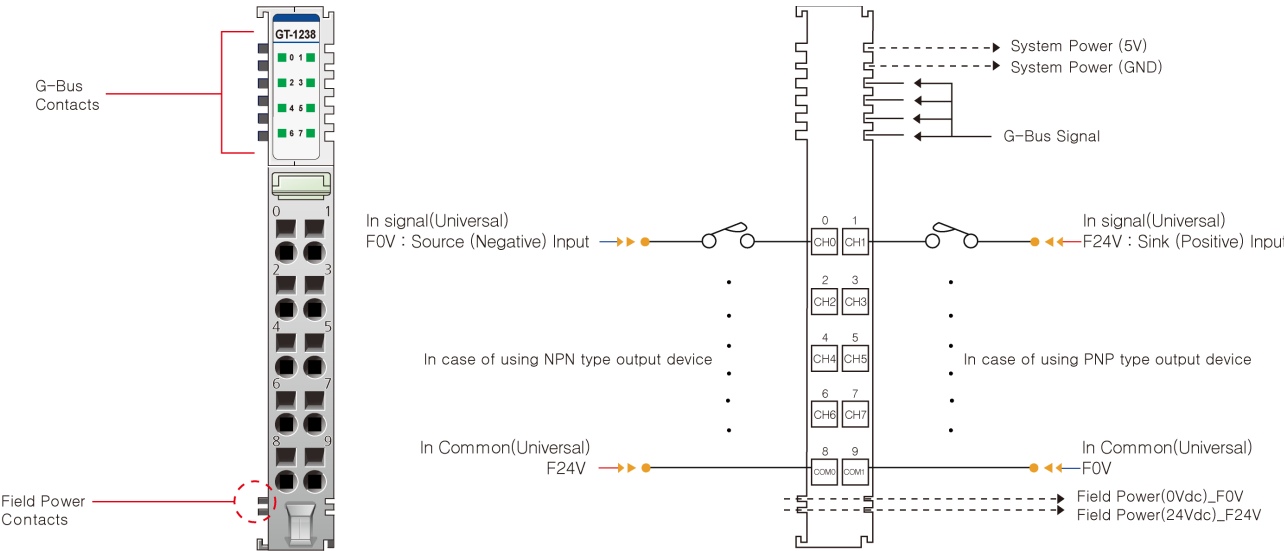
# Specification

## 2. GT-1238 (8 Points, Universal Input Terminal)

### 2.1. GT-1238 Specification

Items	Specification
<b>Input specification</b>	
Inputs per module	8 points universal type
Indicators	8 green input status
On-state voltage	24V dc nominal 15 ~ 26.4Vdc @ 70°C 15 ~ 28.8Vdc @ 60°C
On-state current	4mA @ 24Vdc 5mA @ 30Vdc
Off-state voltage	12.5Vdc @ 25°C
Input signal delay	OFF to ON : Max. 0.3ms ON to OFF : Max. 0.3ms
Input filter	Adjustable, up to 10ms
Nominal input impedance	5.4K ohm typical
Common type	8 points / 2 COM (Universal)
<b>General specification</b>	
Power dissipation	Max. 35mA @ 5Vdc
Isolation	I/O to Logic : photocoupler isolation
UL field power	Supply voltage : 24Vdc nominal, Class 2
Field power	Supply voltage : 24Vdc nominal Voltage range : 15 ~ 30Vdc Power dissipation : 0mA @ 24Vdc
Wiring	I/O Cable Max. 2.0mm <sup>2</sup> (AWG 14)
Weight	59g
Module size	12mm x 99mm x 70mm
<b>Environment condition</b>	<b>Refer to '1. Environment Specification'</b>

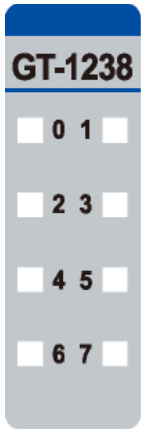
2.2. GT-1238 Wiring Diagram



Pin No.	Signal Description	Signal Description	Pin No.
0	Input Channel 0	Input Channel 1	1
2	Input Channel 2	Input Channel 3	3
4	Input Channel 4	Input Channel 5	5
6	Input Channel 6	Input Channel 7	7
8	Common(Sink Oper.0V / Source Oper.24V)	Common(Sink Oper.0V / Source Oper.24V)	9

2.3. GT-1238 LED Indicator

2.3.1. LED Indicator



LED No.	LED Function / Description	LED Color
0	INPUT Channel 0	Green
1	INPUT Channel 1	Green
2	INPUT Channel 2	Green
3	INPUT Channel 3	Green
4	INPUT Channel 4	Green
5	INPUT Channel 5	Green
6	INPUT Channel 6	Green
7	INPUT Channel 7	Green

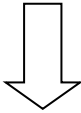
2.3.2. Channel Status LED

Status	LED	To indicate
No Signal	Off	No Input Signal
On Signal	Green	Input Signal detected

2.4. Mapping data into the image table

● 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	Input Filter Value : 0 ~ 10 (unit : ms)							
Byte1	Reserved							