

FnIO G – Series :

GT-44B8

***GT-44B8 (8 Channels, Voltage Output, 0~10V, 0~5V, 16bit,
Channel-to-Channel Isolation Blocks, 2ch/block)***

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History

Rev	Pages	Remarks	Date	Editor
1.00			2023/08/29	Hongseok, Kim

Specification

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
Vibration Resistance	Based on IEC 60068-2-6, 4g
Industrial Emissions	EN 61000-6-4/A11 : 2011
Industrial Immunity	EN 61000-6-2 : 2005
Installation Position	Vertical and horizontal installation is available
Product Certifications	CE, UL

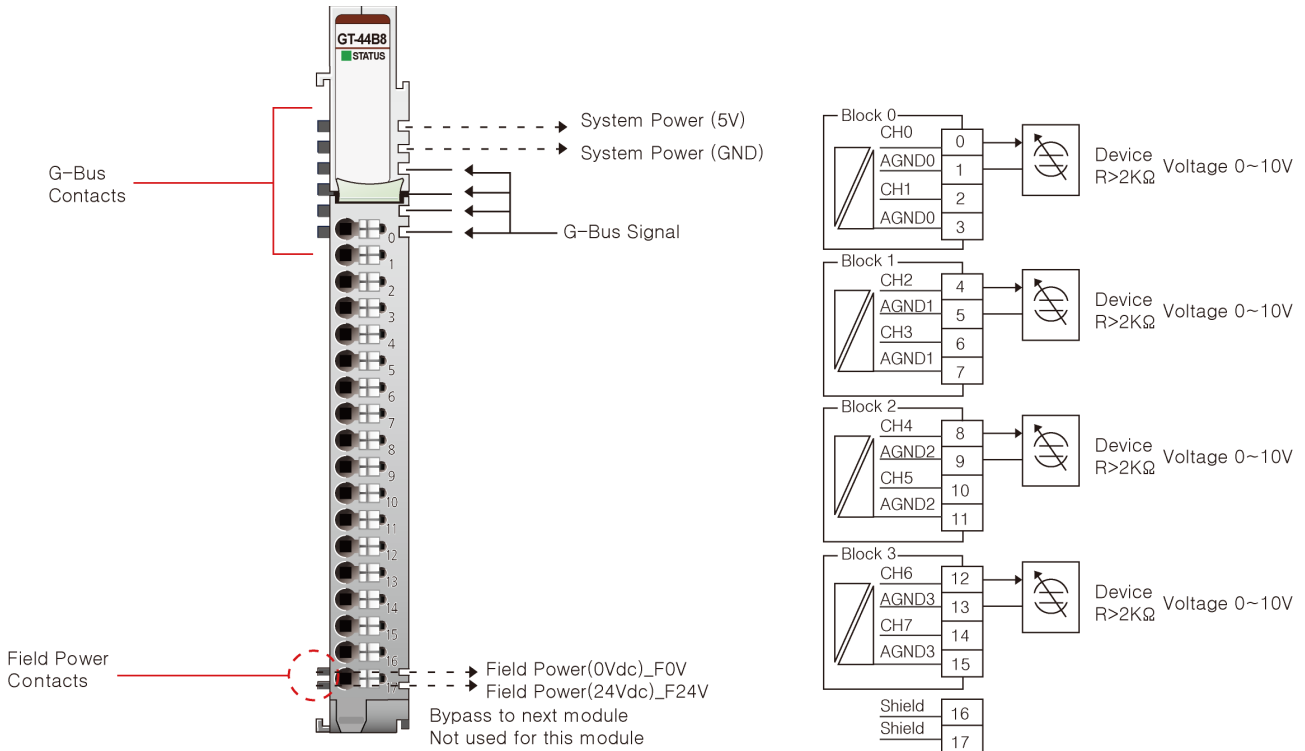
Specification

2. GT-44B8 (8 Channels Voltage Output, 0~10V, 0~5V, 16bit, Channel-to-Channel Isolation Block, 2ch/block)

2.1. GT-44B8 Specification

Items	Specification
Output Specification	
Outputs per module	8 Channels single ended, isolated between block
Indicators(Logic side)	1 Green G-Bus status
Resolution in Ranges	16 bit (Include Sign) 15 bits : 0.31mV/Bit(0~10V) 15 bits : 0.15mV/Bit(0~5V)
Output Range	0 ~ 10Vdc, 0~5Vdc
Data Format	16bits Integer (2' compliment)
Module Error	±0.1% Full Scale @ 25°C ±0.3% Full Scale @ -40°C, 60°C
Load Resistance	Min. 2KΩ
Diagnostic	Field Power Off: LED Blinking
Conversion Time	1msec / All channel
Calibration	Not Required
Common Type	2 Common/block
General Specification	
Power dissipation	Max. 40mA @ 5Vdc
Isolation	I/O to Logic : Isolation Field power to Logic : Isolation Block to Block : Isolation
UL Field Power	Supply voltage : 24Vdc nominal, Class2
Field Power	Supply Voltage : 24Vdc nominal Voltage Range : 18~28.8Vdc Power Dissipation : Max. 125mA @ 24Vdc
Wiring	I/O Cable Max. 0.823mm ² (AWG 18)
Weight	66g
Module Size	12mm x 109mm x 70mm
Environment Condition	Refer to 'Environment Specification'

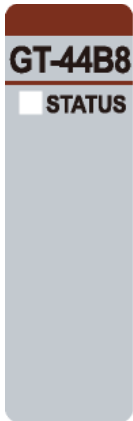
2.2. GT-44B8 Wiring Diagram



Pin No.	Signal Description	Signal Description	Pin No.
Isolation Block#0			
1	Analog Output Channel 0	AGND0	2
3	Analog Output Channel 1	AGND0	4
Isolation Block#1			
5	Analog Output Channel 2	AGND1	6
7	Analog Output Channel 3	AGND1	8
Isolation Block#2			
9	Analog Output Channel 4	AGND2	10
11	Analog Output Channel 5	AGND2	12
Isolation Block#3			
13	Analog Output Channel 6	AGND3	14
15	Analog Output Channel 7	AGND3	16
Shield			
17	Shield	Shield	18

2.3. GT-44B8 LED Indicator

2.3.1. LED Indicator



LED No.	LED Function / Description	LED Color
0	Status LED	Green

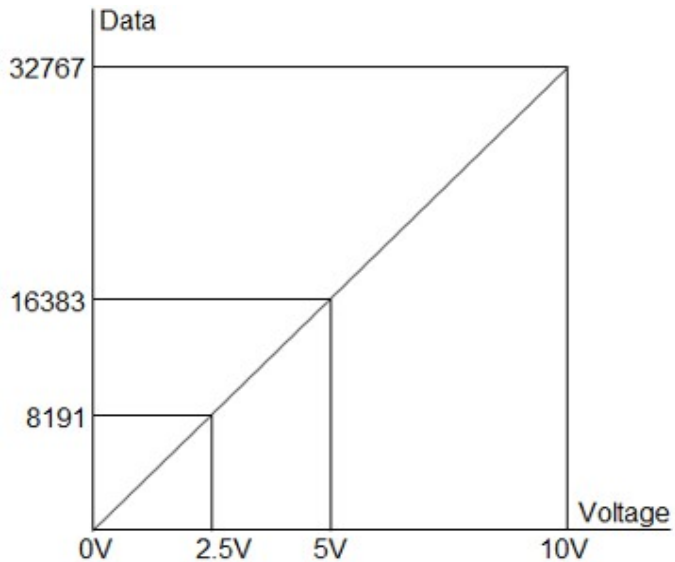
2.3.2. Channel Status LED

Status	LED	To indicate
G-Bus Status	Off	Disconnection
	Green	Connection
Field Power Error	Status Channel Repeat the Green and Off	Field Power is unconnected

2.4. Data value / Voltage

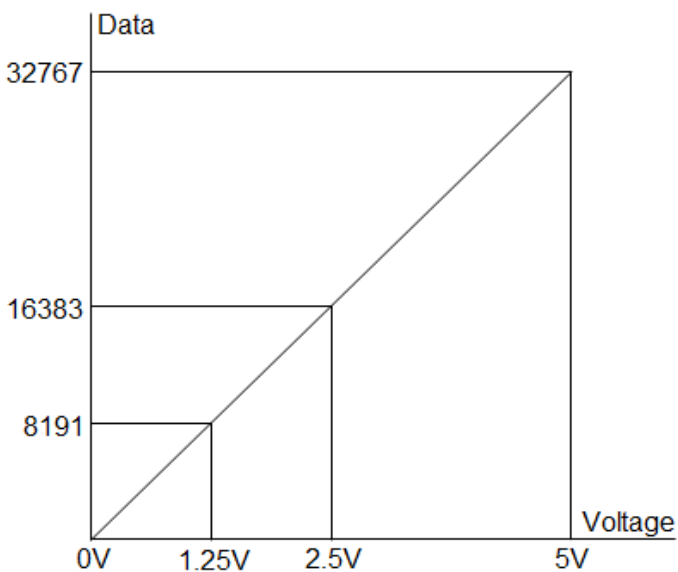
Voltage Range : 0~10Vdc

Voltage	0.0V	2.5V	5.0V	10.0V
Data(Hex)	H0000	H1FFF	H3FFF	H7FFF



Voltage Range : 0~5Vdc

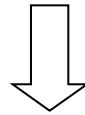
Voltage	0.0V	1.25V	2.5V	5.0V
Data(Hex)	H0000	H1FFF	H3FFF	H7FFF



2.5. Mapping data from the image table

- **Output Image Value**

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte0	Analog Output Ch0 Low byte							
Byte1	Analog Output Ch0 High byte							
Byte2	Analog Output Ch1 Low byte							
Byte3	Analog Output Ch1 High byte							
Byte4	Analog Output Ch2 Low byte							
Byte5	Analog Output Ch2 High byte							
Byte6	Analog Output Ch3 Low byte							
Byte7	Analog Output Ch3 High byte							
Byte8	Analog Output Ch4 Low byte							
Byte9	Analog Output Ch4 High byte							
Byte10	Analog Output Ch5 Low byte							
Byte11	Analog Output Ch5 High byte							
Byte12	Analog Output Ch6 Low byte							
Byte13	Analog Output Ch6 High byte							
Byte14	Analog Output Ch7 Low byte							
Byte15	Analog Output Ch7 High byte							



- **Output Module Data -16byte Output Data**

Analog Output Ch0	
Analog Output Ch1	
Analog Output Ch2	
Analog Output Ch3	
Analog Output Ch4	
Analog Output Ch5	
Analog Output Ch6	
Analog Output Ch7	

2.6. Parameter Data

- Valid Parameter length: 4 Bytes
- Parameter Data

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte0	Fault Action for channel 3		Fault Action for channel 2		Fault Action for channel 1		Fault Action for channel 0	
	00: Fault Value 01: Hold last state 10: Low Limit 11:High Limit							
Byte1	Fault Action for channel 7		Fault Action for channel 6		Fault Action for channel 5		Fault Action for channel 4	
Byte2	Fault Value Low Byte							
Byte3	Voltage Range *	Fault Value High Byte						

* Voltage Range : Voltage Output Range for Module (0 : 0~10Vdc, 1 : 0~5Vdc)