
FnIO G-Series :

GT-4524

GT-4524 (4channels, Voltage output, -10~10V, 12bit)

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History

REV.	PAGES	REMARKS	DATE	Editor
1.00	8	New Document	Oct 25, 2019	Seokhyun, Jun

1. ENVIRONMENT SPECIFICATION

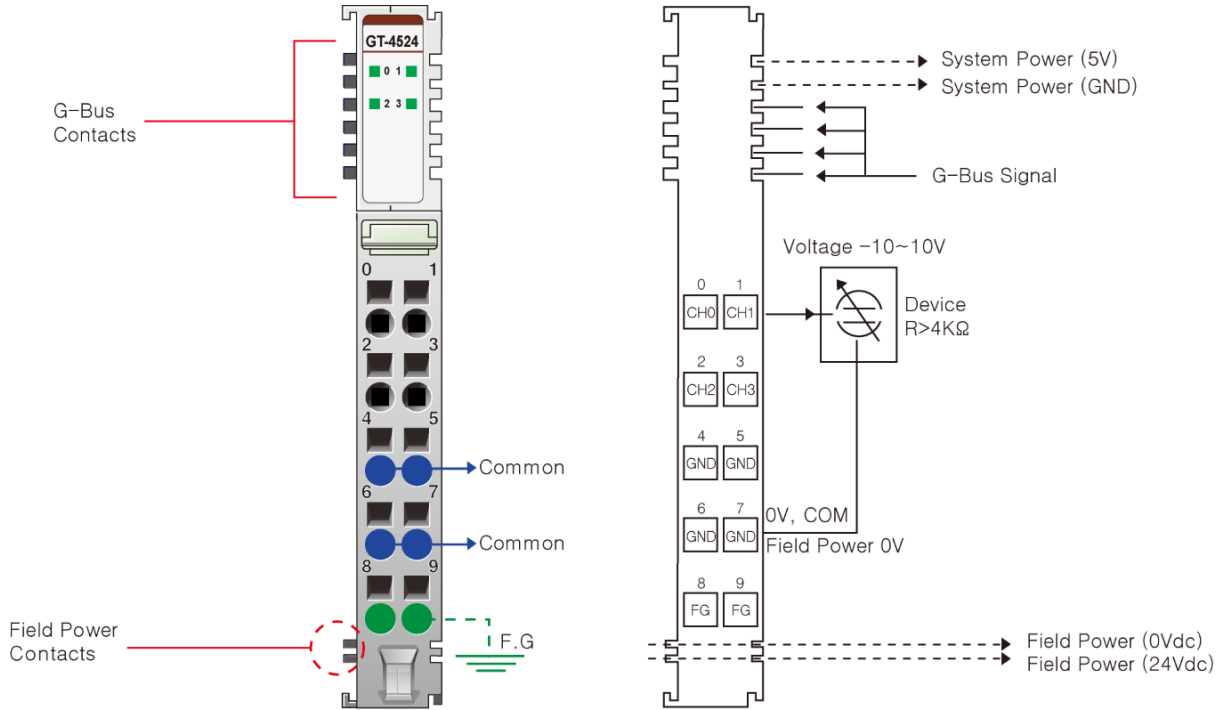
Environmental specification	
Operating Temperature	-40°C~60°C
UL Temperature	-20°C~60°C
Storage Temperature	-40°C~85°C
Relative Humidity	5%~90% non-condensing
Mounting	DIN rail
General Specification	
Shock Operating	IEC 60068-2-27 : 2008/15g, 11ms
Vibration Resistance	Based on IEC 60068-2-6 DNVGL-CG-0039 : Vibration Class B, 4g
Industrial Emissions	EN61000-6-4/All : 2011
Industrial Immunity	EN61000-6-2 : 2005
Installation Position	Vertical and horizontal installation is available
Product Certifications	CE, UL, FCC

2. GT-4524(4channels, Voltage output, -10V~10V, 12bit)

2.1. GT-4524 Specification

Items	Specification
Output specification	
Number of channels	4 channels, single ended, non-isolated between channel
Indicators	4 green output status
Resolution in range	12bit : 4.88mV/bit
Output voltage range	-10V ~ 10V
Data format	16bit integer (2' complement)
Module error	< ±0.1% Full scale @ 25°C ambient < ±0.3% Full scale @ -40 ~ 60°C ambient
Load resistance	Min. 4kΩ
Conversion time	0.2msec / All channel
Diagnostic	Field power off : Led blink Field power on : No output led off Field power on : Output led on
Calibration	Not required
Common type	4 channels / 4 common
General specification	
Power dissipation	Max. 30mA @ 5Vdc
Isolation	I/O to Logic : Isolation Field power : Non-Isolation
UL Field Power	Supply Voltage : 24Vdc nominal, Class 2
Field Power	Supply Voltage : 24Vdc nominal Voltage Range : 18~30Vdc Power Dissipation : Max. 30mA @ 24Vdc
Wiring	I/O Cable Max. 2.0mm ² (AWG 14)
Torque	0.8Nm(7 lb-in)
Weight	59g
Module Size	12 mm x 99 mm x 70 mm
Environment Condition	Refer to 'Environment Specification'

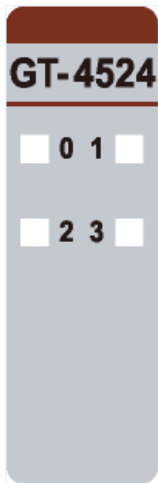
2.2. GT-4524 Wiring Diagram



Pin No.	Signal description	Signal description	Pin No.
0	Analog output channel 0	Analog output channel 1	1
2	Analog output channel 2	Analog output channel 3	3
4	Output channel common(AGND)	Output channel common(AGND)	5
6	Output channel common(AGND)	Output channel common(AGND)	7
8	Frame Ground	Frame Ground	9

2.3. GT-4524 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

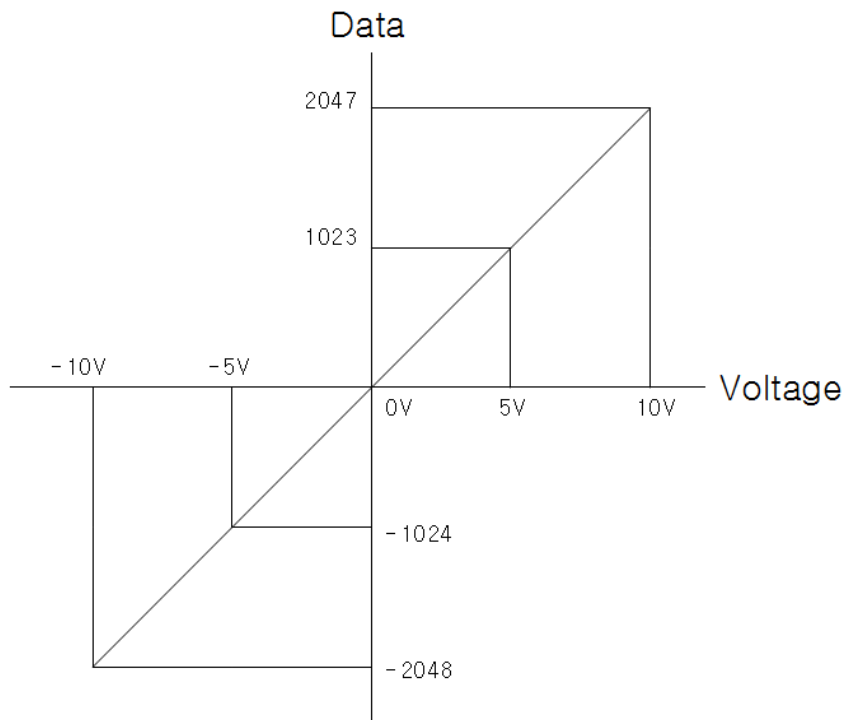
2.3.2 Channel Status LED

Status	LED status	To indicate
Normal operation	Off	No output value
	Green	Normal operation
Field power error	All channel repeat green and off	Field power is unconnected.

2.4. Data Value / Voltage

Voltage Range : -10~10Vdc

Voltage	-10V	-5.0V	5V	10V
Data(Hex)	HF800	HFC00	H03FF	H07FF



2.5 Mapping data from the image table

- Output Image Value

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte 0	Analog Output Ch0 Low byte							
Byte 1	Analog Output Ch0 High byte							
Byte 2	Analog Output Ch1 Low byte							
Byte 3	Analog Output Ch1 High byte							
Byte 4	Analog Output Ch2 Low byte							
Byte 5	Analog Output Ch2 High byte							
Byte 6	Analog Output Ch3 Low byte							
Byte 7	Analog Output Ch3 High byte							



- Output Module Data -8byte Output Data

Analog Output Ch0
Analog Output Ch1
Analog Output Ch2
Analog Output Ch3

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	Not used							
Byte2	Fault Value Low Byte							
Byte3	Fault Value High Byte							