

FnIO G-Series :

GT-5442

GT-5442 (2CH PWM Output, 0.5A/24Vdc, Push-pull)

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History

REV.	PAGES	REMARKS	DATE	Editor
1.00	8	New Document	2019.10.14	Soyeong, Park

1. ENVIRONMENT SPECIFICATION

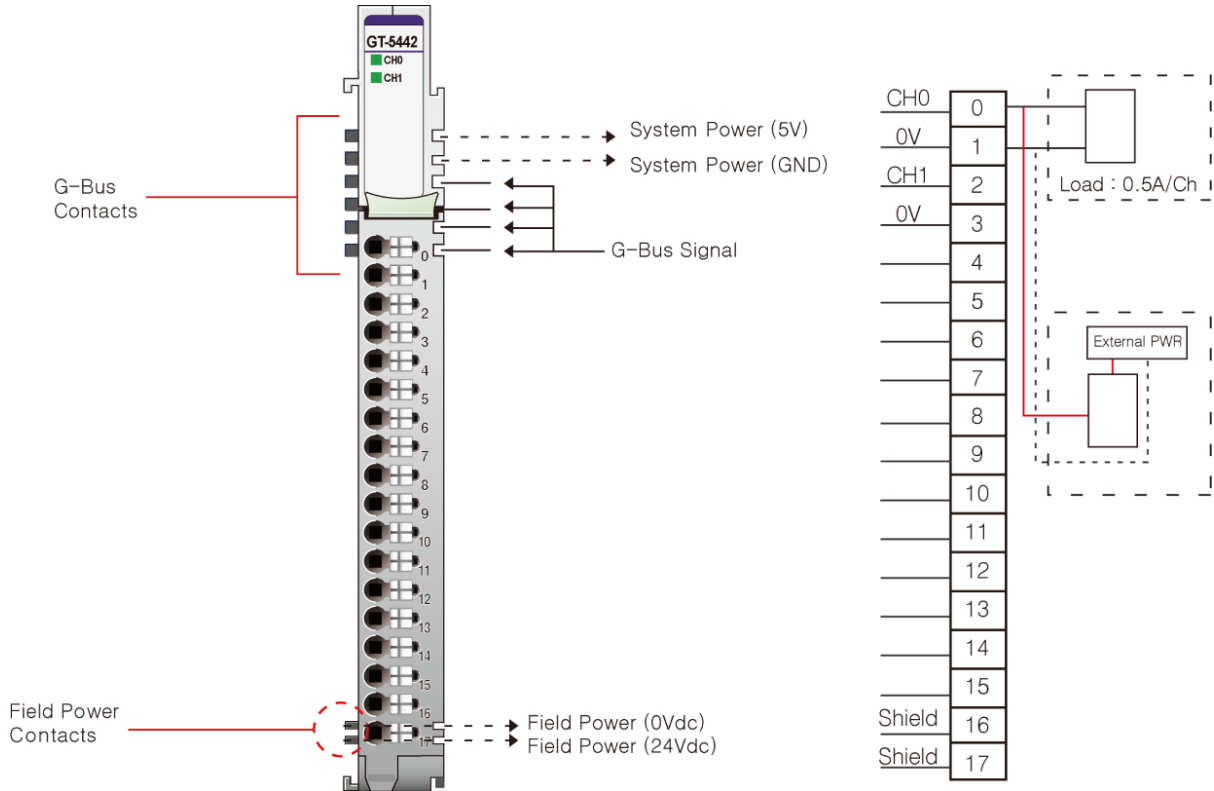
Environmental specification	
Operating Temperature	-40℃~60℃
UL Temperature	-20℃~60℃
Storage Temperature	-40℃~85℃
Relative Humidity	5%~90% non-condensing
Mounting	DIN rail
General Specification	
Chock Operating	IEC 60068-2-27
Vibration Resistance	Based on IEC 60068-2-6 Sine Vibration 5 ~ 25Hz : 1.6mm 25 ~ 300Hz : 4g Sweep Rate : 1 Oct/min, 20 cycles Random Vibration 10 ~ 40Hz : 0.0125g ² /Hz 40 ~ 100Hz : 0.0125 → 0.002g ² /Hz 100 ~ 500Hz : 0.002g ² /Hz 500 ~ 2000Hz : 0.002 → 1.3 x 10 ⁻⁴ g ² /Hz Test time : 1hrs for each test
EMC Resistance	EN 61000-6-2 : 2005 EN 61000-6-4 : 2007+A1:2011
Installation Pos./Protect.Class	Variable/IP20
Product Certifications	CE, UL

2. GT-5442(4CH PWM Output, 0.5A/24Vdc, Push-pull)

2.1. GT-5442 Specification

Items	Specification
Output Specification	
Number of channel	2 Channels
Number of output	2 Output, Push-pull Type
Indicators	2 Green Pulse Output LED
Output Voltage	24Vdc
Output current	0.5A per channel, 1.0A per Module Operating Temperature -40°C~45°C : Max. 0.5A per channel 45°C~60°C : Max. 0.3A per channel
Pulse output frequency	1-5kHz±0.5%
Pulse output duty	0.0-100.0% ±1.0% (0.1%/1LSB), Ton>1us, Toff>1us
Protection	Short Protection
Common Type	2 Common, Field Power 0V is Common
General Specification	
Power dissipation	Max. 75mA @ 5.0Vdc
Isolation	I/O to Logic : Photocoupler Isolation Field power : Non-Isolation
Field Power	Supply Voltage : 24Vdc nominal Voltage Range : 15~32Vdc Power Dissipation : Max. 10mA @ 24Vdc Except Load
Wiring	I/O Cable Max. 2.0mm ² (AWG 14)
Weight	63g
Module Size	12mm x 109mm x 70mm
Environment Condition	Refer to 'Environment Specification'

2.2. GT-5442 Wiring Diagram



Pin No.	Signal Description
0	PWM Output Channel #0
1	Field Power 0V, Common
2	PWM Output Channel #1
3	Field Power 0V, Common
4	N.C.
5	N.C.
6	N.C.
7	N.C.
8	N.C.
9	N.C.
10	N.C.
11	N.C.
12	N.C.
13	N.C.
14	N.C.
15	N.C.
16	Shield
17	Shield

*N.C : Not Connected.

2.3. GT-5442 LED Indicator

2.3.1. LED Indicator



LED No.	LED Function / Description	LED Color
0	PWM Output Channel #0	Green
1	PWM Output Channel #1	Green

2.3.2 Channel Status LED

Status	LED	To Indicate
No Signal	Off	Normal Operation
On Signal	Green	Normal Operation

2.4. Mapping data from the image table

- **Input Image Value - 2Byte**

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte 0	Reserved							
Byte 1	Reserved							

- **Output Image Value - 8Byte**

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte 0	Frequency CH#0 Low Byte							
Byte 1	Frequency CH#0 High Byte							
Byte 2	Duty CH#0 Low Byte							
Byte 3	Duty CH#0 High Byte							
Byte 4	Frequency CH#1 Low Byte							
Byte 5	Frequency CH#1 High Byte							
Byte 6	Duty CH#1 Low Byte							
Byte 7	Duty CH#1 High Byte							

- Range of each Duty is 0(0.0%) ~ 1000(100.0%). If Duty value is 365, then duty rate is 36.5%.

2.5. Parameter Data

- **Valid Parameter length : 2 Bytes**
- **Parameter Data**

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte 0	Reserved							
Byte 1	Reserved							