

FnIO M – Series :

M2618

M2618(8 channels, Sink Output Terminal, 24Vdc/2A)

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History

REV.	PAGES	REMARKS	DATE	Editor
-		Preliminary	2018/6/18	BS HA
1.00			2018/11/14	YM KIM
1.01		Image, UL Spec, Torque, Hotswap Function	2020/04/21	CW SEO
1.02		Vibration specification, Product certification changed	2020/04/27	CW SEO
1.03	10~14	Added ATEX certificate	2020/05/07	BS, HA
1.04		Remove Description pages of Hot Swap Function, Use in Hazardous Environments and Caution(Before using the unit)	2020/12/08	SJ LIM
1.05	5	Power dissipation changed	2021/04/13	BS, HA

1. ENVIRONMENT SPECIFICATION

Environmental specification	
Operating Temperature	-25°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 DNVGL-CG-0039 : Vibration Class B, 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, FCC, ATEX, KR, ABS, DNV

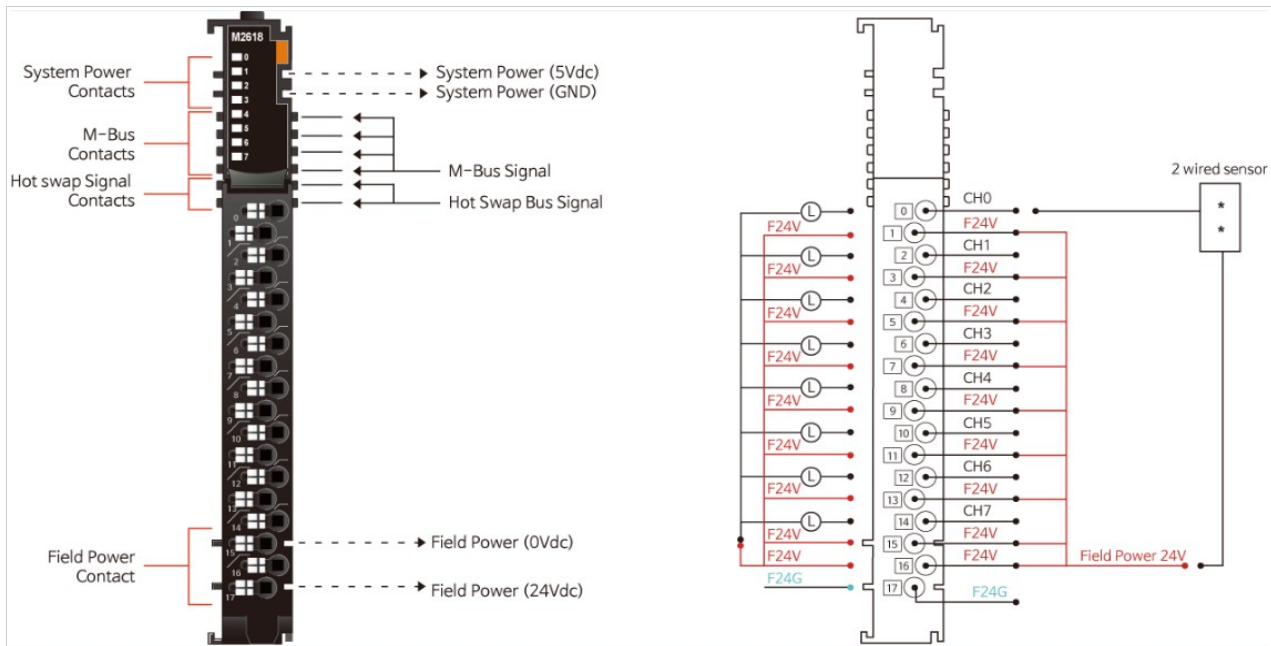
2. M2618 (8 Channels Sink Output Terminal)

2.1. M2618 Specification

Items	Specification
Output Specification	
Output per module	8 channels Sink type
Indicators	8 Green output state
Output Voltage Range	Nominal 24Vdc, Min. 15Vdc to Max. 28.8Vdc
ON-state voltage drop	Max. 1.0Vdc @ 25°C
ON-State Min. Current	1mA per channel
OFF-State Leakage current	Max. 5uA
Output Signal Delay	OFF to ON : 0.3ms maximum ON to OFF : 0.5ms maximum
Output Current Rating	Max. 2A per channel Operating Temperature -25°C~50°C : Max. 10A per unit 50°C~55°C : Max. 7A per unit
COMMON Type	8 channels / 8COM (Single Common)
General specification	
Power dissipation	40mA maximum @ 5.0Vdc
Isolation	I/O to Logic : Photocoupler isolation
UL Field Power	Supply voltage : 24Vdc nominal, Class 2
Field Power	Supply voltage : 24Vdc nominal Voltage range : 15~28.8Vdc Power dissipation: 40mA maximum @ 28.8Vdc
Single Wire	0.205mm ^φ - 1.3mm ^φ (24-16 AWG)
Torque	0.8Nm(7 lb-in)
Weight	72g
Module Size	12mm x 110mm x 75mm
Hot Swap	Possible
Environment Condition	Refer to '1. Environment Specification'

* Class 2, adjacent to voltage rating (30Vmax)

2.2. M2618 Wiring Diagram



Pin No.	Signal Description
0	Output Channel 0
1	Common (Field Power 24V)
2	Output Channel 1
3	Common (Field Power 24V)
4	Output Channel 2
5	Common (Field Power 24V)
6	Output Channel 3
7	Common (Field Power 24V)
8	Output Channel 4
9	Common (Field Power 24V)
10	Output Channel 5
11	Common (Field Power 24V)
12	Output Channel 6
13	Common (Field Power 24V)
14	Output Channel 7
15	Common (Field Power 24V)
16	Field Power 24V
17	Field Power 0V

Series No	Through Air	Over Surface	CTI
RTB18C	1.5mm	1.5mm	175≤CTI≤400

Spacings : The following minimum spacing in inches (millimeters) shall be maintained between uninsulated live parts of opposite polarity; and between an uninsulated live part and a grounded Part including any mounting surface or exposed metal part.

2.3. M2618 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

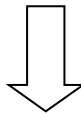
2.3.2. Channel Status LED

Status	LED	To indicate
Not Signal	Off	Normal Operation
On Signal	Green	Normal Operation

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



- **Output Module Data**

D7	D6	D5	D4	D3	D2	D1	D0
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2.5. Parameter Data

- **Valid Parameter length: 2 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 value (ch0~ch7) 0:Off, 1:On							