

# Input-Output Module FW821







### **DESCRIPTION**

The FW821 input-output module provides one 24VDC output and one feedback input monitor. The input line is monitored for open line faults and ground faults, and the contact must thus be wired with an end-of-line resistor. The output line is monitored for open lines, short-circuit faults, ground faults, and external 24VDC power source loss. It is a UL/ULC listed device according to UL864 and ULC-S527 for Fire Protective Signaling Systems for indoor use. When the output is activated the device red LED will indicate the event condition by blinking longer. When the feedback is activated the device red LED will indicate the event condition by blinking twice. A return to the normal condition will cause the event to disappear and the device LED indicator will return to blinking every 4 seconds.

The FW821 is an intelligent addressable module and takes one address on the Signaling Line Circuit (SLC) or Data Communication Link (DCL) of the fire alarm control panel.

#### **ATTENTION**

Products must be installed per the National Fire Alarm Code, NFPA 72, CAN / ULC-S524, and/or National Electrical Code, depending on the country of the installation. Check the information on equipment used in the system from other manufacturers for instructions and restrictions. The detector should never be installed in the following places: where there is a lot of exhaust gas, kitchens, near fireplaces, boilers, etc. Smoke detectors should not be used with detector guards unless the suit has been evaluated and approved for this case.

#### NOTE

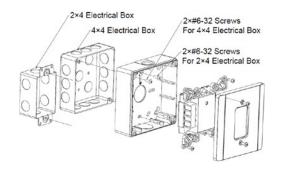
Do not paint this unit.

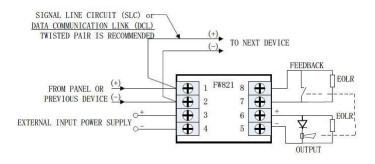
Any material extrapolated from this document or Maple Armor's instructions or other materials describing the product for promotional or advertising purposes, or any other purpose, including the description of the application, the use, installation, and testing of the product is the sole responsibility of the user. Maple Armor assumes no responsibility for the use. In no event shall Maple Armor's liability exceed the purchase price of the product.

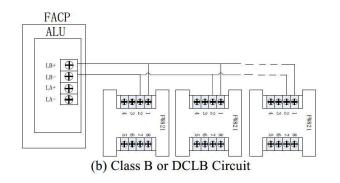
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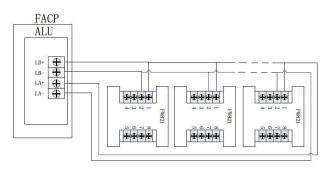
## **INSTALLATION AND WIRING**

Mount the FW800/FW801 base onto a 2"X4" or 4"X4" electrical box using the screws provided, as illustrated below. Or mount the module flush mount on a 4"X4" electrical box.









FW821-DS-R1.1 07/2024

(a) Class A or DCLA Circuit

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## **SPECIFICATIONS**

SLC/DCL Nominal Voltage	24VDC
SLC/DCL Voltage Range	15 to 28VDC
Standby Current	0.15 mA
Active Current (SLC/DCL)	0.26 mA
External Input Power Supply	24VDC (nominal)
External Input Power Supply	15.4 to 24.4VDC (range)
Active Current (Output)	80 mA, 0.35pf
Output Range	15.0 to 24.0VDC
	(Supplied by Model FW106 Auxiliary power output);
(Special Application)	20.0 to 25.9VDC
	(Supplied by Listed 24VDC Regulated power supply).
Max. Line Impedance (Input)	25 Ohms
Max. Line Impedance (Output)	1 Ohm
Max. Impedance for Grounding	6.6 K Ohms
Compatible EOLR	FW421 (10K Ohms)
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Mounting	FW800/FW801 box
Dimension	120 mm (L) x 120 mm (W) x 45 mm (H)
Weight (with backbox)	9.2 oz (261 g)
Wiring Gauge	12 to 18 AWG

# **CATALOG NUMBER TO ORDER**

Model	Description
FW821	Input-Output Module
FW800	Surface Box
FW801	Surface Box, Deep