

# Primis Single Port Bridge™

## Installation Guide

### PART NUMBERS



FR-50-40-1, FR-50-40-1L



ENTERPHONE

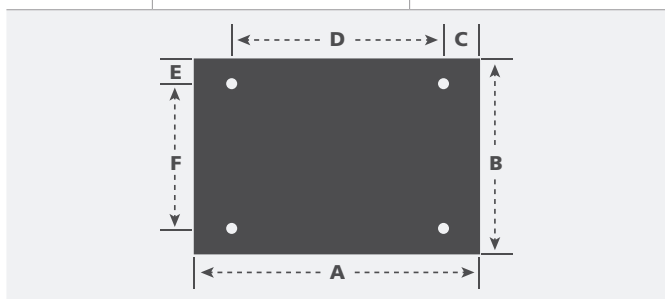
FR-50-24-1

### PHYSICAL SPECIFICATIONS

Length	76 mm (3.00 in.)
Width	47 mm (1.85 in.)
Height	17 mm (0.67 in.)
Weight	26 g (1.20 oz.)
Max Readers	1
Max Input	2
Max Output	1
Certifications	<b>Electrical:</b> UL294 and UL294B <b>Power over ethernet:</b> IEEE 802af <b>EMI Radiation:</b> FCC Part 15 Class B

### BASE PLATE MOUNTING

Dimension	Millimeters	Inches
A	116.07	4.57
B	78.74	3.10
C	15.24	0.60
D	85.59	3.37
E	10.16	0.40
F	58.42	2.30



### SUMMARIZED LEVELS OF ACCESS CONTROL COMPONENTS

Destructive Attack	Level I
Line Security	Level I
Endurance	Level I
Standby Power	Level I
Single Point Locking	Level I

### INSTALLATION REQUIREMENTS

Primis Bridges should only be installed in dry, non-condensing environments. The ambient temperature of the environment should range between -40°C and 50°C.

Primis Encryption Bridges should only be mounted to non-conductive surfaces. Incorrect mounting may short-circuit the electronics, which will cause it to malfunction.

DC power, reader, input contact, and output device wires should be between 16-28 AWG. They should also be stripped 5.5mm to sufficiently fit the terminal blocks and ensure that they do not come in contact with each other.

### INSTALLATION PROCEDURE

For each of the following steps, be sure to reference the wiring diagram on page 2 for additional details:

- Connect a Wiegand Reader to the Wiegand Reader Input on the Primis Bridge.
  - If the reader has a shield wire, connect the shield wire to the 0v terminal on the Wiegand Reader Input. If an extension cable is used between the reader and the Primis Bridge, connect the reader's shield wire to the cable's shield, then connect the cable's shield to the 0v terminal on the Wiegand Reader Input.
  - Any unused wires on the reader must be evenly snipped and have their tips insulated using electrical tape or equivalent. The shield wire on the reader must also be completely insulated.
- If you have any supervised input contacts, wire them to the Digital Contact Inputs using Method 1 or Method 2.
- If you have any non-supervised input contacts, wire them to the Digital Contact Inputs.
- If you have a relay output contact, wire it to the Relay Output.
- Supply power to the Primis Bridge using either or both of the following methods:
  - A 2.25 – 5.25 W Power over Ethernet (PoE) port on an Ethernet switch connected to the Primis Bridge using a Cat5e or Cat6 cable.
  - 12 – 16 Vdc & 350 mA (300 mA external & 50 mA internal) DC power connected directly to the TB1 terminal on the Primis Bridge.
- If you are not using PoE to power your Primis Bridge, connect a Cat5e or Cat6 cable from any port on an Ethernet switch to the RJ-45 connector on the Primis Bridge. **Note:** Ethernet only supports a maximum cable length of 100 m.
- To configure and add the Freedom Bridge to a Primis Server, refer to the Primis Solution Guide manual.

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## OPTIONAL DC POWER IN

0v	DC Power Ground
+12	DC Power Input
<b>TB1 Requirements</b>	<ul style="list-style-type: none"> <li>12 - 16 Vdc</li> <li>350 mA (300 mA external &amp; 50 mA internal)</li> </ul>

2

## WIEGAND READER INPUT

+12	Power Output
0v	Ground
D1	Data 1 Input
D0	Data 0 Input
Ld	LED Output
Bz	Buzzer Output
<b>Power Output Using PoE</b>	<ul style="list-style-type: none"> <li>12.0 - 16.5 Vdc</li> <li>300 mA max current</li> </ul>
<b>Power Output Using DC</b>	<ul style="list-style-type: none"> <li>8.5 - 16.0 Vdc</li> <li>300 mA max current</li> </ul>

3

## RESET BUTTON

Press and hold this button for 10 seconds to reset the configuration back to default.

4

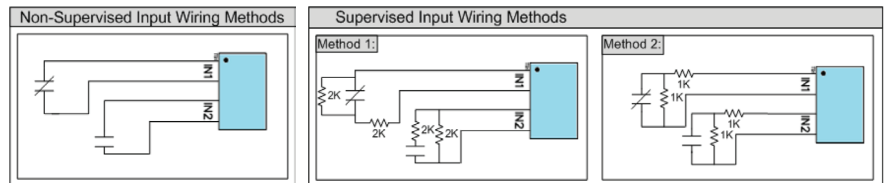
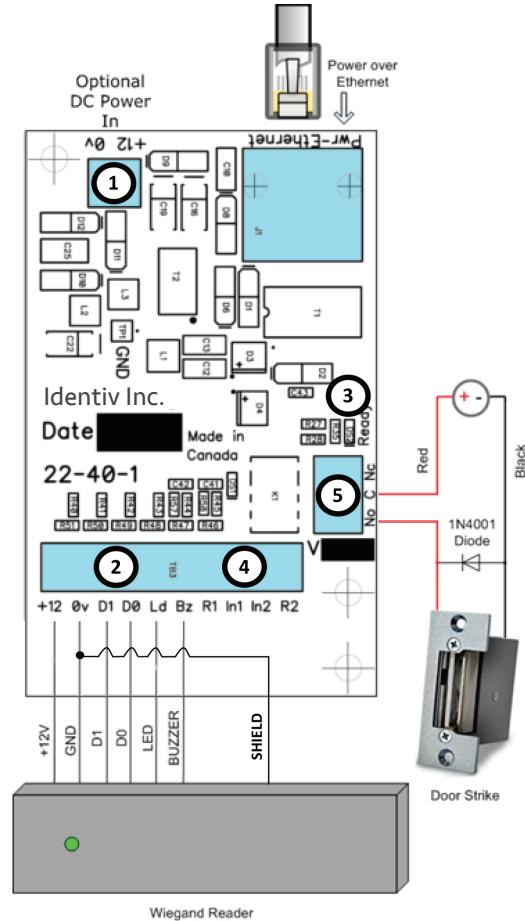
## DIGITAL CONTACT INPUTS

R1 - R2	Ground
In1 - In2	Non-supervised or supervised inputs 1 - 2

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## RELAY OUTPUT

Nc	Normally closed
C	Common
No	Normally open
<b>Relay Contact</b>	<b>DC:</b> 30 Vdc @ 1 Adc <b>AC:</b> 60 Vac @ 0.5 Aac



A flashing green "Ready" LED light on the Primis Bridge circuit board indicates that the bridge is powered but not connected to a server.



A solid green "Ready" LED light indicates that the Primis Bridge has established a connection to the server and is ready to use.

## CAUTION

**This product is sensitive to Electrostatic Discharges (ESD).**  
Take precautions while handling the product by using proper grounding straps at all times.

## NOTE

As long as the total current of the reader plus a door strike DOES NOT EXCEED 300mA, you may power the door strike using the power out and ground from the reader Input terminal block.