

TX3-IP-256 IP Gateway Installation

A. Contents of Kit

- TX3-IP-256
- Mounting plate
- Screwdriver for terminal block
- 2 screws for mounting plate
- 1 screw for securing body to mounting plate
- USB flash containing manuals and software
- USB cable for configuration

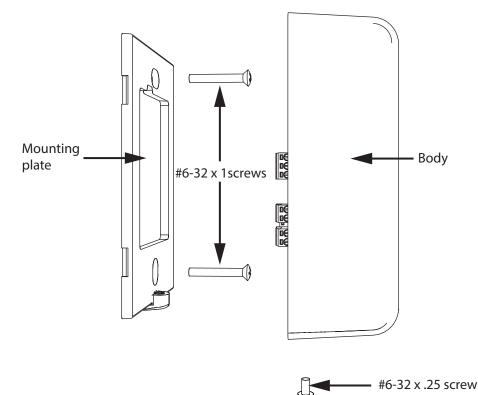


Figure 1. Parts of TX3-IP-256

B. Dimensions

122 mm x 79 mm x 41 mm (4 25/32" x 3 3/32" x 1 39/64")

C. Operating Temperature

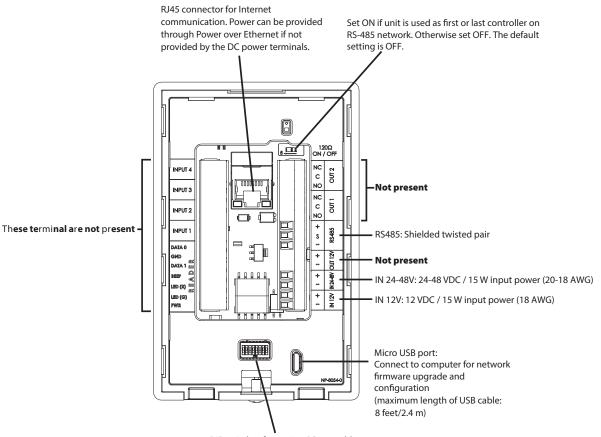
0° C - 49° C (32° F - 120° F) Indoor use only



D. Wiring

WARNING: Disconnect the power before wiring.

- RS-485 wiring maximum length: 1219.2 m (4000 ft)
- PoE maximum length: 100 m (328 ft)



DIP switches for setting RS-485 address

Figure 2. Connections on TX3-IP-256

E. DIP Switch

• Use DIP switches 1-6 to set the RS-485 network address.



Figure 3. Set the RS-485 address

Note: You must set the RS-485 address even if you are not using RS-485.

- DIP switch 7: keep off.
- DIP switch 8: Set open (off) to get an IP address from the DCHP server, and set closed (on) to set a fixed IP address using the TX3 Configurator software. The default setting is off.

For more information and the complete list of RS-485 addresses, see LT-980, the TX3 Card Access System Manual, on the Mircom website (www.mircom.com) or the USB flash.



F. **RS-485**

Connect the RS-485 input terminal to the RS-485 output terminal of another controller. See Figure 4.

Set the 120Ω switch ON if the unit is used as first or last controller on RS-485 network. Otherwise set OFF. The default setting is OFF.

Note: Use twisted shielded pair.

Recommended cables:

- RS485 cables
 - Belden 3109A RS-485, (4 pr) 22 AWG (7x30) or equivalent
 - Belden 9842 RS-485, (2 pr) 24 AWG (7x32) or equivalent
 - Belden 9841 RS-485, (1 pr) 24 AWG (7x32) or equivalent
- CAT5 Cables
 - Belden 72001E ETHERNET Cat 5e 2 Pair, 24 AWG or equivalent
 - · Belden 70006E Cat 5e, 100Mb/s, Quad, AWG 22 (1) or equivalent

Maximum total length:

- 4000 feet (1244 m) for 22 AWG
- 2500 feet (762.5 m) for 24 AWG •

Optional common reference connection if available First controller on network **RS485** s Turn switch labeled "120 Ω " ON Connect shield to one controller's chassis ground, which should then connect to building ground **RS485** Turn switch labeled "120 Ω" OFF s Connect shield to one controller's chassis ground, which should then connect to building ground Last controller on network RS485 S Turn switch labeled "120 Ω" ON

Figure 4. **RS-485**

G. **USB** Port

The USB port provides a connection to a PC, for configuring the Card Access System and upgrading the firmware.

Η. Power

The IP Gateway can be powered in three ways. Use only one of the power inputs.

- Power over Ethernet (PoE) use Cat 5 cable
- 12 VDC/15 W use 18 AWG •
- 24-48 VDC/15 W use 20-18 AWG



I. Example Network Diagram

Use TX3-IP-256 IP Gateway to connect TX3 devices to an Ethernet network. The IP Gateway is a bridge between RS-485 on the device side, and Ethernet on the network side.

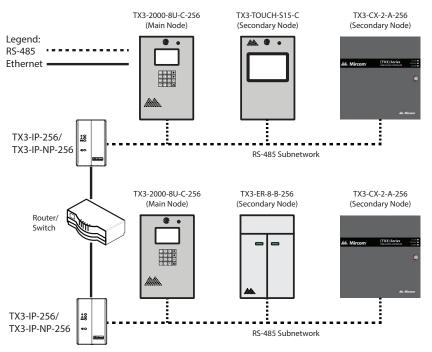


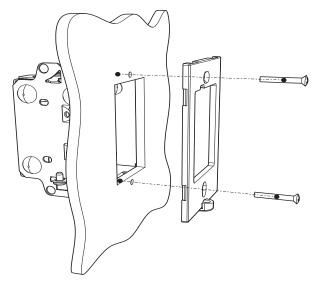
Figure 5. TX3 devices on a mixed network with TX3-IP-256

J. Mounting

TX3-IP-256 mounts on a single or dual gang box. Use a dual gang box if you need more room for the wires. If you use a dual gang box, use a single gang box cover to cover the hole.

Mount TX3-IP-256 the right way up (the Mircom logo is on the bottom).

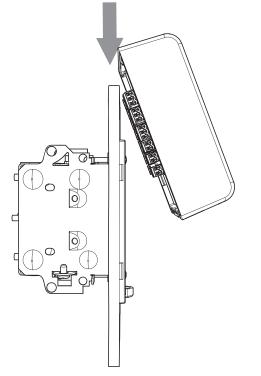
1. Attach the mounting plate to the single gang box with the two provided #6-32 x 1" screws.



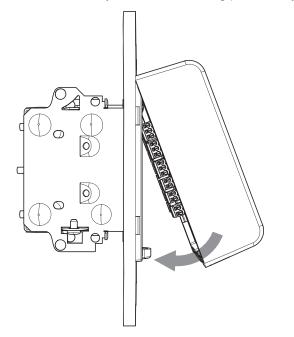
2. Feed the wires through the hole in the mounting plate and connect them to TX3-IP-256.



3. Fit the top of the body onto the mounting plate. There are two hooks in the body that fit into grooves in the mounting plate.

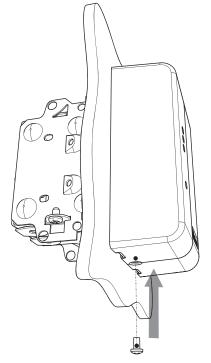


4. Press the body on to the mounting plate until you hear a click.



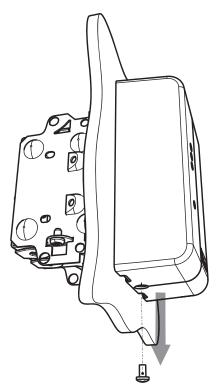


5. Secure the body to the mounting plate with the provided #6-32 x 0.25" screw.



K. Unmounting

1. Remove the screw from the bottom of the unit.





2. Insert a screwdriver into one of the two notches on the boot and use it as a lever to separate the body from the mounting plate.

