SIEMENS

Installation Instructions
Document No. 563-002
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Wireless Field Level Network Transceiver (FLNX)

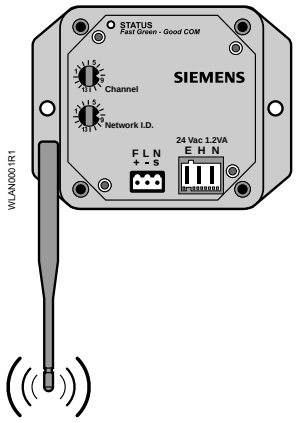

Figure 1. Wireless Field Level Network Transceiver (FLNX).

Product Description

The FLNX (Figure 1) is mounted at or near the FLN device and is powered by 24 Vac. The antenna can either be direct-mounted to the radio, or mounted remotely for installations where the location of the FLNX would cause the antenna to be shielded. For example, when the FLNX is mounted inside a TEC enclosure.

Product Numbers

563-004	Wireless Field Level Network Transceiver (FLNX)
563-007	Direct Mount Antenna
563-008	Remote Mount Antenna

Transceivers do not come with an antenna. Antenna(s) must be ordered separately.

Accessories

563-027	Pre-terminated Cable Kit (2 cables) (One 14” Power and one 14” Comm. - recommended for Factory Mounting)

Warning/Caution Notations

WARNING:

Personal injury/loss of life may occur if you do not follow the procedures as specified.

CAUTION:

Equipment damage or loss of data may occur if you do not follow the procedures as specified.

Expected Installation Time

5 minutes.

Tools

- Electro-Static Discharge wrist strap
- Small flat-blade screwdriver
- Cordless drill/driver set

Prerequisites

- All wiring must conform to NEC and local codes and regulations.
- 24 Vac Class II power source available.
- Any application specific hardware or devices installed.

Antenna Mounting

Direct Mount Antenna

The preferred mounting configuration is to mount the FLNX outside the TEC enclosure in a location where it will establish the maximum number of communication links with other FLNXs and its associated FPX. For example, in a VAV application this will typically be on the bottom of the VAV box in the ceiling plenum with the entire antenna extending below the VAV box (Figure 2).

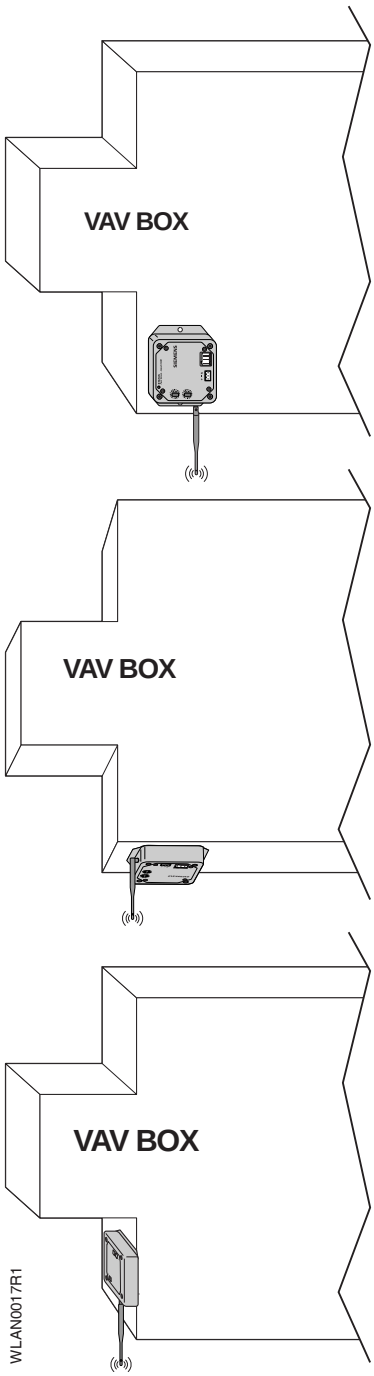

Figure 2. FLNX Mounting Options, no enclosure.

Remote Mount Antenna

The FLNX is mounted inside the TEC (or any metal) enclosure and the antenna is brought through a 1/2" knockout (Figure 3).

The antenna extension cable 12" long.

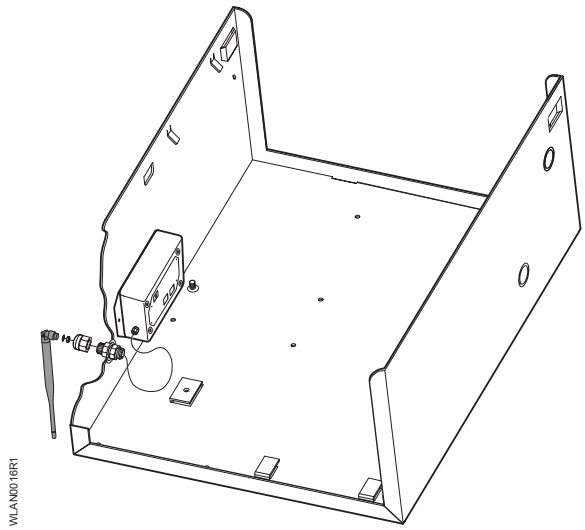

Figure 3. Mounting Inside Enclosure.

Installation

1. Determine the optimal location of the FLNX and antenna for RF communications.
2. Mount the FLNX using screws, double-sided tape or velcro (included).
3. Connect the communication port of the FLN device to the FLNX.
4. Connect 24 Vac power (Figure 4).

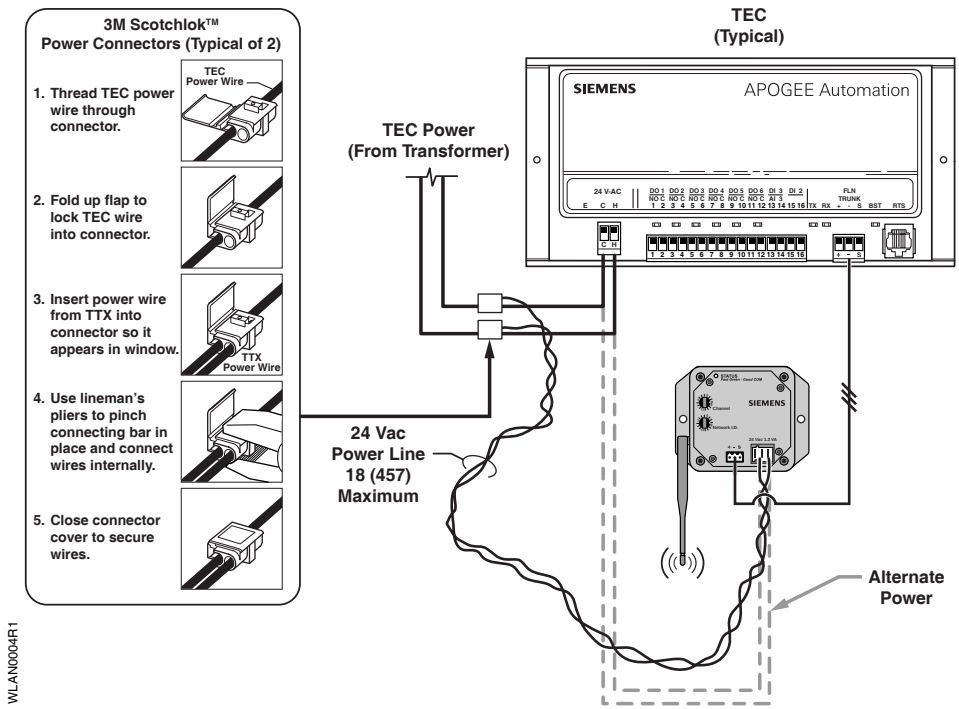

Figure 4. FLNX Communication and Power Wiring.

5. **For Remote Mount Antenna:** Locate the liquid tight fitting so that the antenna extension cable does not incur excessive pull force. At the desired enclosure location, punch a 1/2" knockout and use the locknut to secure the body of the liquid tight fitting into the knockout.
6. **For Remote Mount Antenna:** Route the antenna through the body of the liquid tight fitting (Figure 5). Hand-tighten the liquid tight fitting nut to secure the antenna in place.

Make certain the liquid tight fitting nut tightens on the antenna base (Figure 5) and not the antenna so that the antenna can be articulated.

7. Connect the antenna wire to the FLNX.
8. Position the antenna in a vertical orientation (up or down).

CAUTION:

For Factory installations: The antenna must be protected during shipment to avoid damage to the antenna.

The installation is complete.

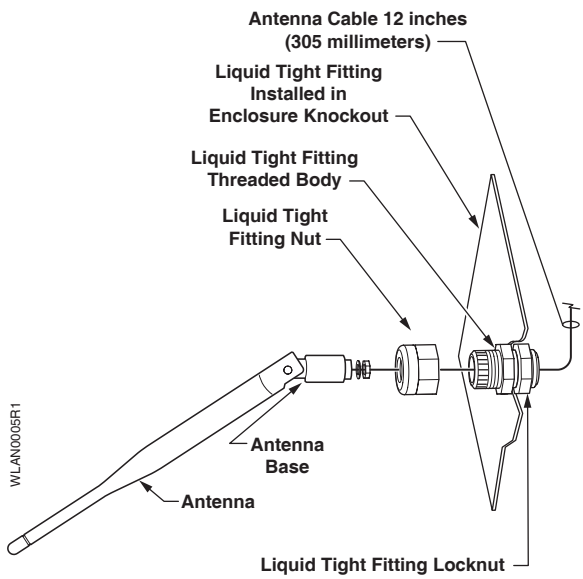

Figure 5. Remote mount antenna.

FCC NOTE:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To comply with FCC's RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Industrie Canada certification:

This device has been designed to operate with an antenna having a maximum gain of 5dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50Ω.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication.

The Wireless Field Level Network Transceiver (FLNX) is to be installed or replaced by professional installation personnel only.