TR-F485C Fiber to SBUS Converter Module
Product Installation Document

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PN LS10004-002TR-E:B 6/1/2022 ECN: 00003637

1 Description

The TR-F485C is a module used in pairs to convert the fire alarm control panel's (FACP) SBUS from wire to fiber and back again.

NOTE: Do not use this product to network FACPs.
The primary power, SBUS, and SLC circuits are supervised and power-limited. Fiber-optic circuits are supervised.

1.1 Compatibility

The TR-F485C is used with compatible Triga Series FACPs and power supplies. For additional information, refer to the *FACP Installation Manuals*.

2 Specifications

- External Power Supply: 9-35VDC @ 125 mA max
- Fiber Connection Duplex ST connectors for Tx and Rx Data Fiber Cable Duplex 62.5 micron Multi-mode Fiber Data Rate 115.2K bits/second
- Fiber Distance: up to 1.0 Mile (1.6Km) TR-F485C Connection (two-wire) or Terminal strip, and jumper selectable bias / termination
- There are several jumpers on the board. These jumpers need to remain in place.
- Maximum attenuation: 5.5db
- TR-F485C cable, single twisted pair, 24AWG, Helix 21011
- TR-F485C data direction control automatic half duplex transmitter enable control, for any baud rate / data bits
- Operating Temperature: 32° - 120°F (0-49°C)
- Humidity: 10%-93% (non-condensing)
- Dimensions: 4.75" x 4.25" x 1.0" (12.1cm x 10.8cm x 2.5cm)

3 Mounting

3.1 FACP Cabinet

Mount the TR-F485C in a compatible FACP/power supply cabinet.

1. Remove AC power and disconnect backup batteries from the main control panel.
2. Attach the supplied 1/4" standoffs to the studs in the back of the cabinet.
3. Align the TR-F485C over the standoffs and secure with screws provided.

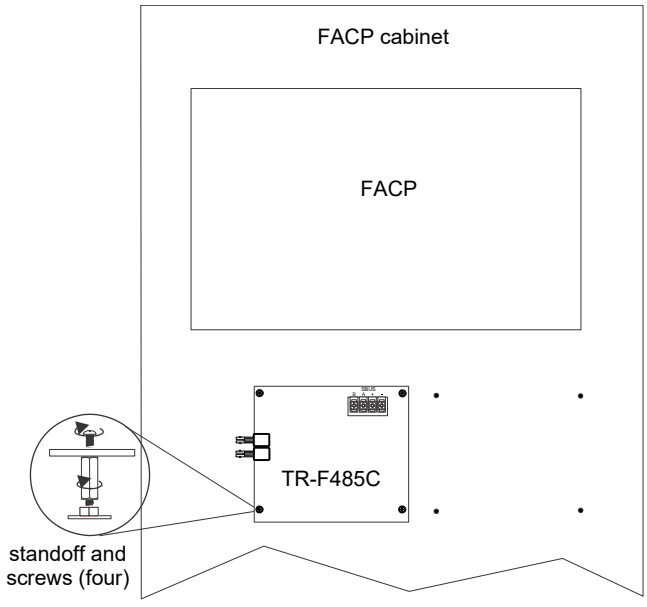

Figure 1 TR-F485C Mounting in FACP Cabinet

NOTE: When the TR-F485C is used with the TR-75, you must use the TR-5815RMK Remote Mounting Kit.

3.2 TR-5815RMK Cabinet

The TR-5815RMK is a remote mounting kit that offers you the option to install up to two TR-F485C converter modules in a single cabinet. When using the TR-5815RMK, it must be mounted in the same room within 20’ (6.1 m) of the control panel or the power supply and in conduit.

1. Insert four supplied plastic standoffs into the holes in the plate in the back of the TR-5815RMK cabinet.
2. Align the TR-F485C over the standoffs and press down gently until the board is secured to standoffs.

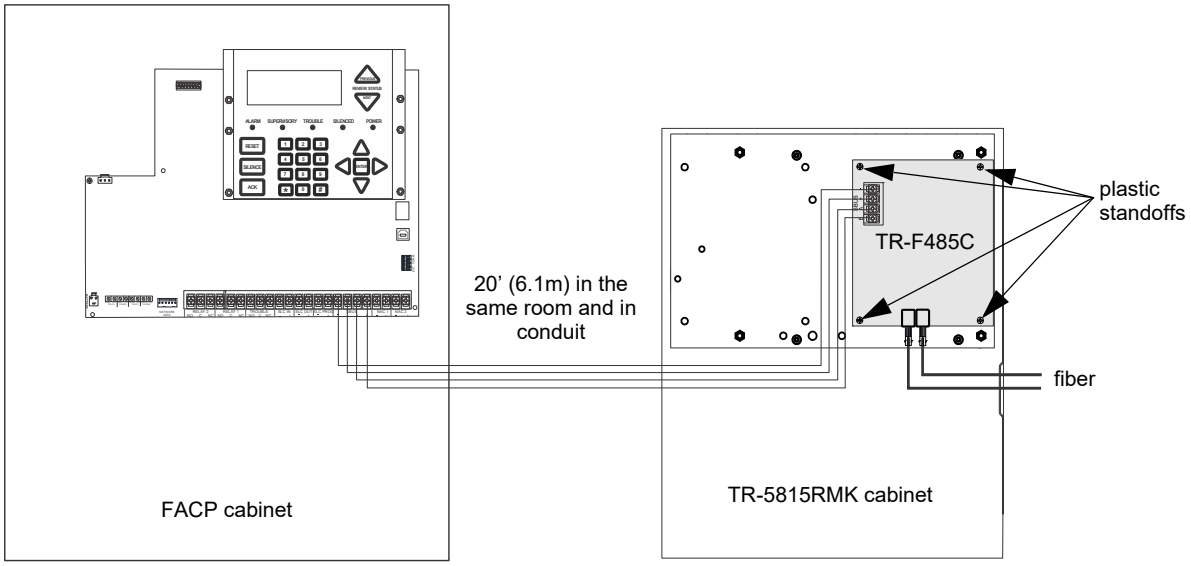

Figure 2 TR-F485C Mounting using the TR-5815RMK Cabinet

4 Wiring

4.1 FACP Wiring

See Table 1 and Figure 4 to properly wire the TR-F485C to a compatible FACP.

TR-F485C Terminals	FACP SBUS Out Terminals
+	+
-	-
A	A
B	B

Table 1 TR-F485C to FACP Terminal Connections

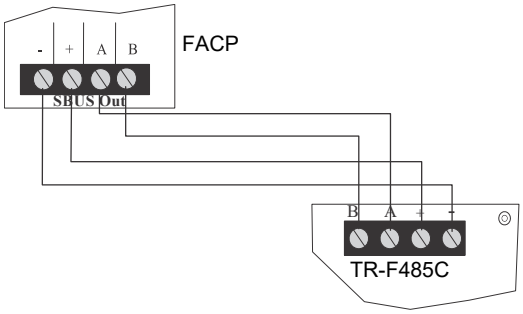

Figure 3 TR-F485C Connection to the Panel

4.2 TR-F485C to Power Supply Wiring Connections

See Table 2 and Figure 4 for terminal connections from the TR-F485C to a TR-RPS1 Power Supply.

TR-F485C Terminals	Power Supply Terminal Number
+	32, 22*
–	33, 21*
A	31
B	30

Table 2 TR-F485C to Power Supply Terminal Connections

* T-tap connection. Refer to Figure 4.

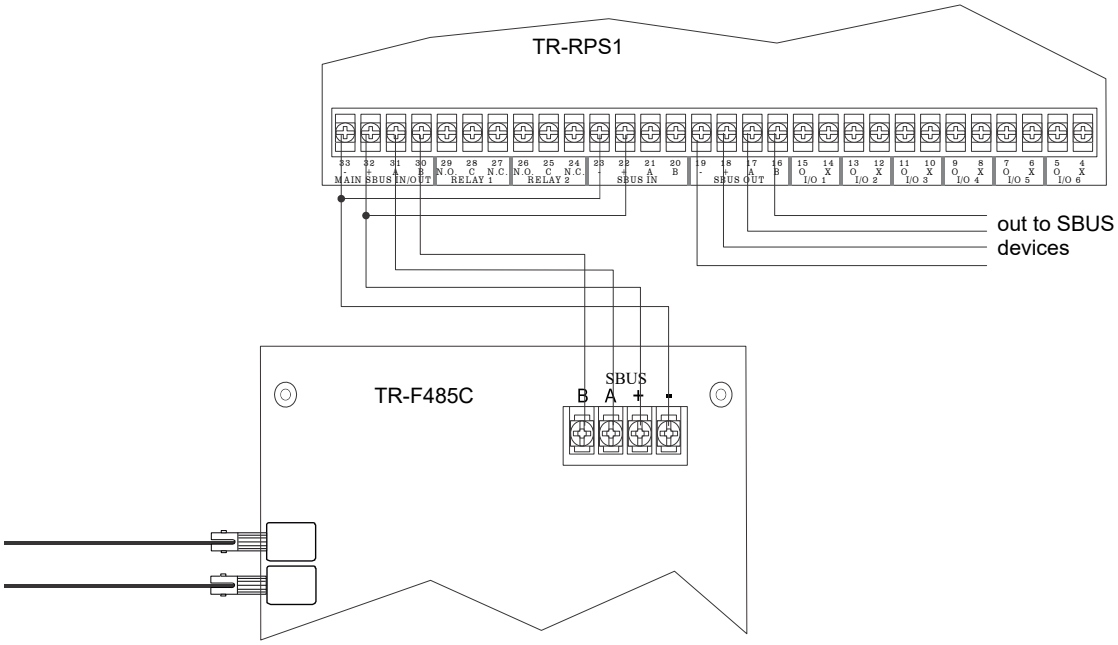

Figure 4 TR-F485C to Power Supply Terminal Connection

4.3 TR-F485C to TR-F485C Fiber Wiring Connections

See Table 3 for terminal connections from the first TR-F485C to the second TR-F485C.

TR-F485C Terminals	TR-F485C Terminals
RX	TX
TX	RX

Table 3 TR-F485C to TR-F485C Terminal Connections

Figure 5 shows the fiber wire connection from the panel to the power supply.

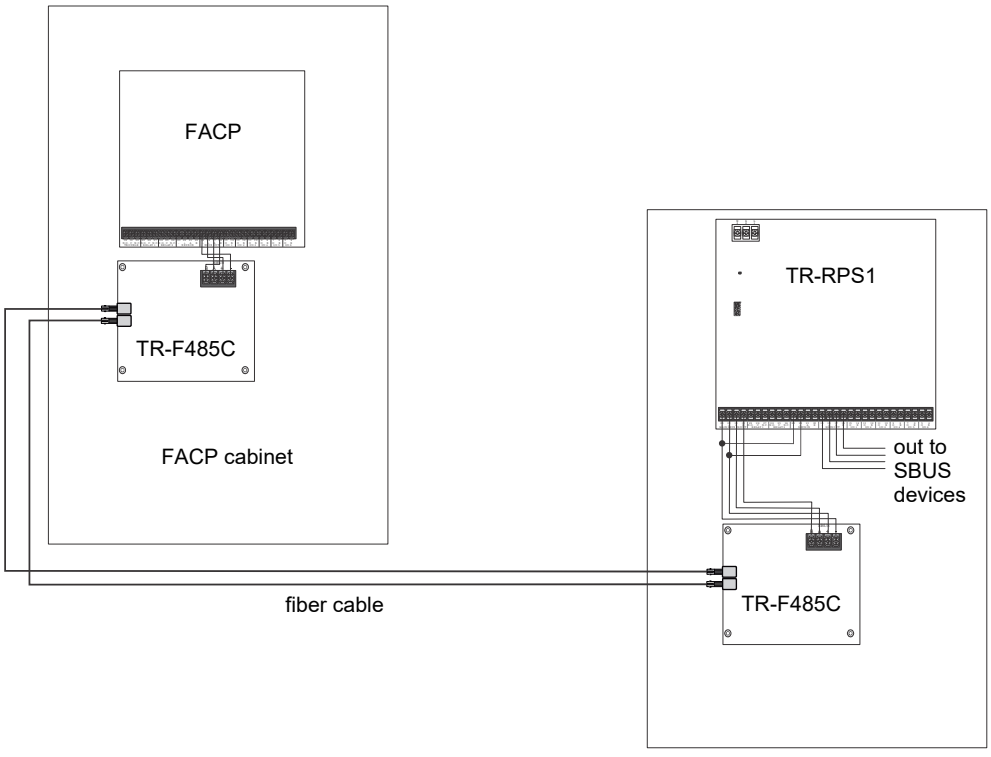

Figure 5 Fiber Wire Connection from the Panel to the Power Supply