SK-F485C Fiber to SBUS Converter Installation Instructions

The SK-F485C offers a seamless conversion from panel SBUS connection to fiber and back again.

Note: Product is not to be used to network FACP’s.

Note: Primary power, SBUS, and SLC circuits are supervised and power limited. Fiber optic circuits are supervised.

Compatibility

The SK-F485C is compatible with the following Silent Knight FACP’s and power supplies:

- IFP-50 / 5700
- IFP-100 / 5808
- IFP-1000 / 5820XL
- IFP-2000 / RPS-2000
- IFP-2000VIP
- IFP-100ECS
- IFP-1000ECS
- 5895XL
- RPS-1000
- 5496

Mounting

You can mount the SK-F485C in a compatible FACP cabinet.

To mount the SK-F485C:

1. Remove AC power and disconnect the backup batteries from the main control
2. Mount the SK-F485C in an FACP or power supply using the 1/4" standoff provided and secure with screws provided. See Figure 1 and Figure 2.

Note: When the SK-F485C is used with IFP-100/5808 or IFP-50/5700, you must use the 5815RMK cabinet.

Mounting using 5815RMK

The 5815RMK is a remote mounting kit that lets you install up to two SK-F485C converter modules in a single cabinet.

Note: When using a 5815RMK, you must mount it within 20’ of the control panel or power supply in conduit.
Wiring

See Table 1 and Figure 4 to wire a SK-F485C to a compatible FACP.

Table 1: SK-F485C to FACP Connections

<table>
<thead>
<tr>
<th>SK-F485C Terminals</th>
<th>FACP SBUS Out Terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
</tr>
</tbody>
</table>

SK-F485C to SK-F485C Connection

See Table 2 for terminal connections for SK-F485C to the SK-F485C.

Table 2: SK-F485C to SK-F485C Connection

<table>
<thead>
<tr>
<th>SK-F485C Terminals</th>
<th>SK-F485C Terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td>RX</td>
<td>TX</td>
</tr>
<tr>
<td>TX</td>
<td>RX</td>
</tr>
</tbody>
</table>

SK-F485C to Power Supply Connection

See Table 3 and Figure 5 for terminal connections for SK-F485C to the 5895XL or RPS-1000.

Table 3: SK-F485C to Power Supply Connection

<table>
<thead>
<tr>
<th>SK-F485C Terminals</th>
<th>Power Supply Terminal Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>32</td>
</tr>
<tr>
<td>–</td>
<td>33</td>
</tr>
<tr>
<td>A</td>
<td>31</td>
</tr>
<tr>
<td>B</td>
<td>30</td>
</tr>
<tr>
<td>22</td>
<td>32</td>
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<tr>
<td>23</td>
<td>33</td>
</tr>
</tbody>
</table>
Panel to Power Supply Fiber Connection

![Diagram of fiber connection](image)

Figure 6: Connecting fiber from panel to power supply

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 Multimode Fiber Data Rate 115.2K bits/second
- Fiber Distance Up to 1.0 Mile (1.6Km)
- SK-F485C Connection (two-wire) or Terminal strip, and jumper selectable bias / termination

**Note:** There are several jumpers on the board. These jumpers need to remain in place.

- Maximum attenuation 5.5db
- SK-F485C Cable, single twisted pair, 24AWG, Helix 21011.
- SK-F485C Data Direction Control Automatic half duplex transmitter enable control, for any baud rate / data bits
- Operating Temp: 32° - 120°F (0-49°C)
- Humidity: 10%-93% (non-condensing)
- Dimensions: 4.75” x 4.25” x 1.0”