**FOX - RS-485 Fiber Optic Transceiver**

**Overview**

BAPI recommends fiber optic cable for HVAC communications networks that travel between buildings.

The FOX - Fiber Optic Transceiver converts the RS-485 data from the copper network to a fiber optic signal for transmission to other buildings. A FOX in the other building converts the fiber optic signal back into RS-485 for the remote copper network.

The FOX module accepts the multi-mode fiber cable on standard ST connectors. The copper RS-485 connection is made on the 8-pole plug along with the power and ground connections. The FOX also plugs into the communications repeater backplane (RBP). Each FOX module consumes one unit load on the RS-485 bus.

A green power LED indicates that 12 VDC is present to the module. A red LED at each fiber cable connection flashes when data is transmitted or received.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>BA/FOX</td>
<td>RS-485 Fiber Optic Transceiver</td>
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<tr>
<td>BA/FOX-KIT</td>
<td>FOX Communication Kit (see page G25) includes one Fiber Optic Transceiver (FOX) Module, a 350 mA voltage converter (VC350A), a Single Repeater Backplane (SRBP) and a 4” piece of 2.75” snaptrack</td>
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**Associated Products**

- 3312VC Voltage Converter (p. G11)
- TRK18 Snaptrack (p. G18)
- RBP or SRBP Repeater Backplanes (p. G30-32)

**Specifications**

- **Power Voltage:** 11 to 13 VDC
- **Power Current:** 250 mA max. (3 VA max.)
- **Communications rates:** 2.4K, 4.8K, 9.6K, 19.2K and 38.4K Baud
- **Network Load:** 1 unit load (RS-485 side)
- **Optical Network Length:** 10,500 ft (3,200 meters) (max. attenuation of 4 dB/Km)
- **RS-485 Network Length:** 4,000 ft (1.2Km)