RBP - Communications Repeater Backplane (BA/RBP)

Installation and Operation Instructions

Overview

The RBP4 and RBP8 - Communications Repeater Backplanes fit into 2.75” snaptrack and provides power, communications and convenient mounting for the RPTR - RS-485 Repeater, FOX - RS-485 Fiber Optics Transceiver and SOX - RS-485 Single Mode Fiber Optic Transceiver ETA modules.

Connectors on the face of the RBP Backplane plug into mating connectors on the RPTR, FOX and SOX. The RPTR, FOX and SOX modules share data across the RBP Backplane which provides transient protection for the communications network. Several RBP Backplanes can be plugged together to share data through the backplane end connectors, allowing all the RPTR, FOX and SOX modules to form a large communications hub.

The RBP Backplane receives 12 VDC power from a 3312VC voltage converter or VC350A Voltage Converter.

Mounting

Each RBP Backplane board requires 3-1/4 inches of snaptrack. Attach the snaptrack to a suitable mounting surface. Convention has the screw terminal connector (input power socket) to the left.

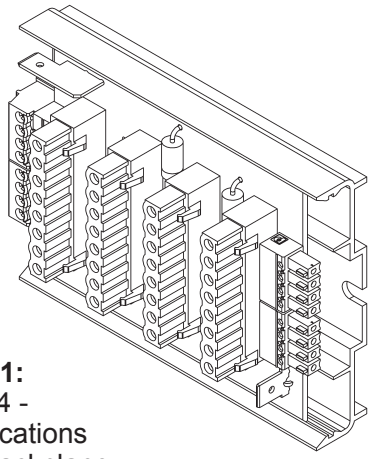

Fig. 1:
RBP4 - Communications Repeater Backplane mounted in snaptrack

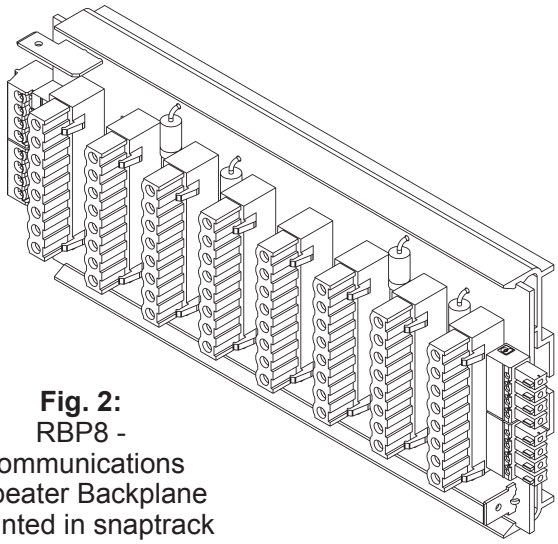

Fig. 2:
RBP8 - Communications Repeater Backplane mounted in snaptrack

The connectors on each end allow the RBP Backplanes to be interconnected while keeping the same connector-to-connector pitch. The center connectors provide power and data signals to the RBP Backplane boards.

Plug the RPTR, FOX and SOX modules into the RBP Backplanes as shown in Fig. 3.

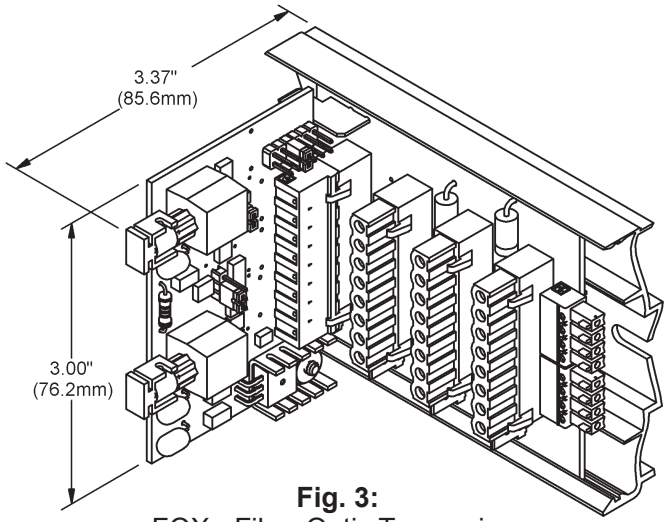

Fig. 3:
FOX - Fiber Optic Transceiver module plugged into an RBP4 - Communications Repeater Backplane

Specifications subject to change without notice.

Component Identifier

Connect S5, 1/4-inch fast-on connector, to a good local building ground.

Connect the power cable to the left-most socket using the 4-pole plug J1 as shown in Fig. 4. Connect the other end of the cable into a BAPI 3312VC or VC350A Voltage Converter.

Terminate the RPTR, FOX and SOX modules that are plugged into the RBP according their own installation guides.

J1 & J2 TERMINALS

Pin #	Function
1	Protected Ground
2	Signal Ground
3	Comm –
4	Comm +
1	Signal Ground
2	Protected Ground
3	+12 VDC
4	Power Ground

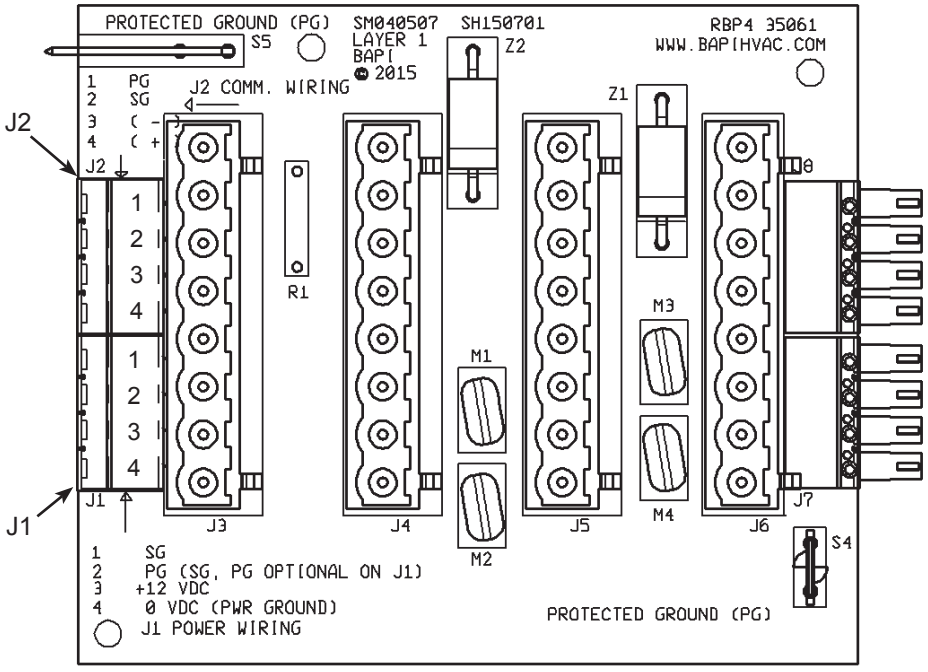

Fig. 4:
RBP - Communications Repeater Backplane pin numbers

Note: Pins 3 and 4 of J2 may be used for the local RS-485 bus. Pins 3 and 4 of J2 are common with all repeaters plugged in to the RBP Backplane. Pins 3 and 4 of J2 are common with all RPTR or FOX module J2s that are plugged into the RBP Backplane.

Diagnostics

PROBLEMS	SOLUTIONS
The BAPI ETA module plugged into the RBP Backplane has no power.	- Make sure that the voltage converter or power supply is turned on and supplying power to the RPB Backplane - Make sure that the ETA module is firmly plugged into the RBP Backplane - Make sure that the power connector is firmly plugged into the RBP Backplane
The BAPI ETA module will not plug into the RBP Backplane	- Make sure that the RBP Backplane is inserted into the snaptrack in the proper orientation

Specifications

Power Voltage ..... 11 to 13 VDC
Power Current ..... 4 Amp maximum