RBP-PB Repeater Backplane Power Bridge (BA/RBP-BP)

Installation and Operation Instructions

35640_ins_RBP_PB rev. 03/23/16

Overview

The Repeater Backplane Power Bridge (RBP-PB) is used between Communication Repeater Backplane (RBP) modules to bridge the power and break out the 485 communications lines to another node. The Power Bridge snaps into the same snaptrack as the Repeater Backplane modules that it bridges.

This allows simplified power wiring of a multi-protocol communications hub such as the Carrier Comfort Network and Modbus. The upper plug connects to the comm. bus on the right; the lower plug connects to the comm. bus on the left.

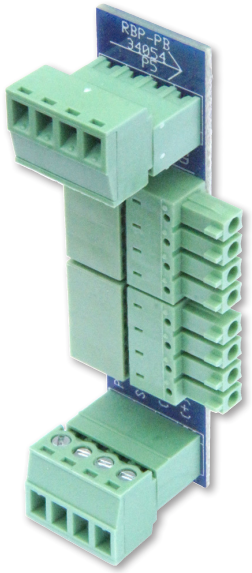

Fig. 1:
Repeater Backplane Power Bridge (RBP-PB) module

Communications Repeater Backplane Overview

The Communications Repeater Backplane (RBP) provides power, communications and convenient mounting for the the RPTR - Repeater, FOX - Fiber Optics Transceiver and SOX - Single Mode Fiber Optics 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 from a 3312VC or VC350A voltage converter.

Mounting

The Power Bridge (RBP-PB) module connects to either side of the Communications Repeater Backplane (RBP) module and is mounted in the same snaptrack as the RBP.

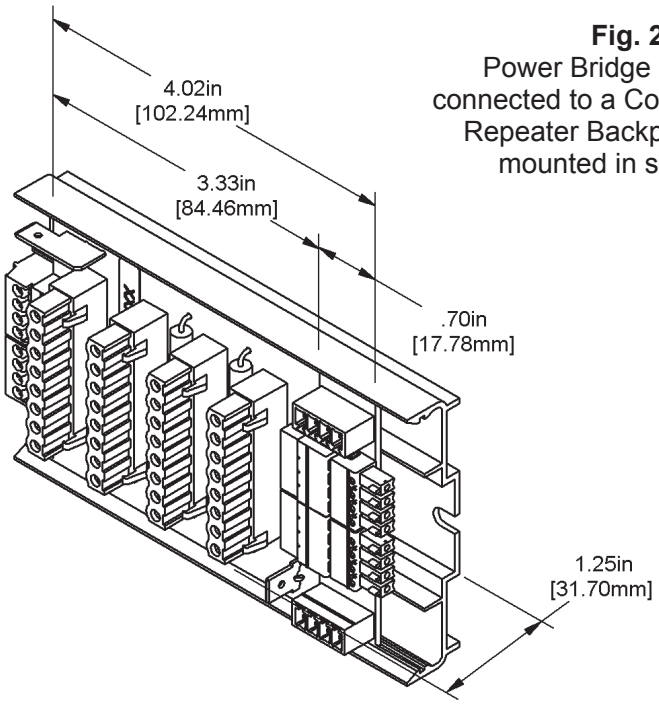

Fig. 2:
Power Bridge (RBP-PB) connected to a Communications Repeater Backplane (RBP) mounted in snaptrack

Specifications subject to change without notice.

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Component Identifier - Power Bridge and Communications Repeater Backplane Modules

Communications Repeater Backplane (RBP) Wiring:
Connect S5 (1/4" 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. 3. Connect the other end of the cable into a BAPI 3312VC, 3324VC or VC350A voltage converter or other suitable power supply.

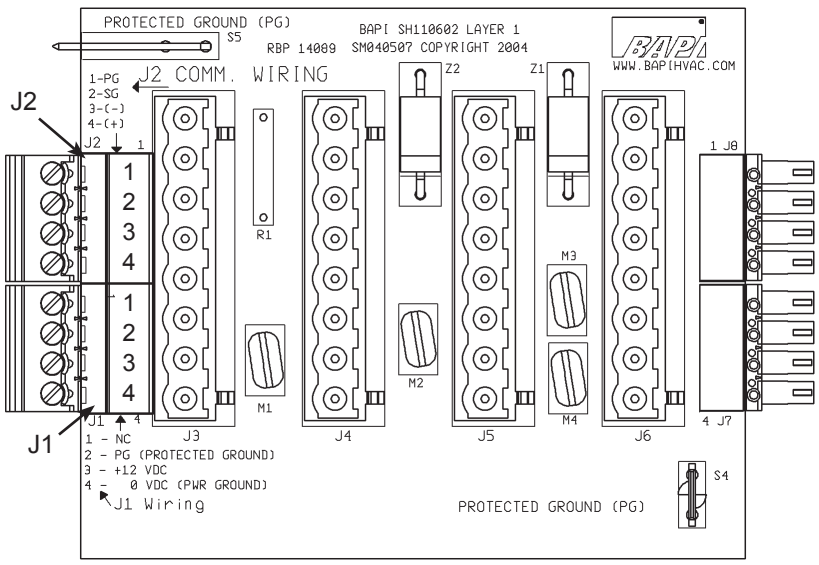

Fig. 3:
Communications Repeater Backplane (RBP) components

Note: 1 and 2 of J2 may be used for the local RS-485 bus. J2 is common with P6 on the RBP-PB. 1 and 2 of J2 are common with all RPTR module J2s that are plugged into the RBP Backplane.

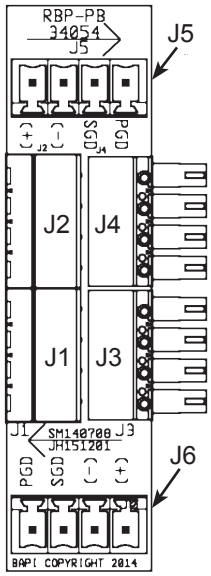

Fig. 4:
Power Bridge (RBP-PB) components

RBP MODULE J1 & J2 TERMINALS

Pin #	Function
1	Protected Ground
2	Signal Ground
3	Comm –
4	Comm +
1	Not Connected
2	Protected Ground
3	+12 VDC
4	Power Ground

POWER BRIDGE MODULE

Pin #	Function
J1/J2	Left Hand RBP
J3/J4	Right Hand RBP
J5	Right Hand RBP's Communication Circuit
J6	Left Hand RBP's Communication Circuit

Diagnostics

PROBLEMS	SOLUTIONS
BAPI RBP-PB board will not plug into backplanes	- Make sure that the RBP is inserted into the snaptrack in the proper orientation.
Communications are not travelling through the channel	- Make sure that the RBP-PB is firmly plugged into the RBP - Make sure that the power connector is firmly plugged into the RBP - Make sure leads are properly secured to outside controller. - Make sure that the voltage converter or power supply is turned on and supplying power to the RBP

Specifications

Power Voltage ..... 12 VDC
Power Current ..... 4 Amp maximum

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