OPTO 22

POWER SUPPLIES FOR DIGITAL I/O MOUNTING RACKS

Features

- > 5 VDC output
- > Ideal for powering Optomux or mistic brain boards and I/O
- > Compatible with Raspberry Pi
- > Mounts directly on digital I/O rack
- > Brain mounts on top of the power supply
- > Operating temperature range: -25 to 65 °C

DESCRIPTION

The PBSA, PBSB, and PBSC 5 VDC power supplies are designed to work with an Opto 22 digital I/O mounting rack connected to an Optomux[®] E1 or B1 brain board, or a *mistic*[™] B100 brain board. Each power supply is sized to provide power for the brain board and logic power for 16 digital I/O modules.

The PBSC can also be used with a Pamux[®] B5 brain board and is sized to provide power for the brain, 16 modules, and a Term1 Pamux bus terminator.

The brain board mounts directly on top of the power supply and the power supply mounts directly to the mounting rack. Two screws on the power supply make the electrical connection to threaded contacts on the mounting rack.

For the complete list of supported mounting racks, brain boards, and carrier boards, see "Specifications" on page 2.



Compatible with Raspberry Pi

The PSBC can also be used with a Raspberry Pi[®] and Opto 22's Digital I/O Carrier Board for Raspberry Pi (part number OPTO-P1-40P) to monitor and control industrial devices.

To ensure sufficient, consistent, and reliable power to the Pi and I/O modules, we recommend that you attach the power supply to the mounting rack (and not directly to the Pi).

NOTE: If your Pi uses USB-powered peripherals like hard drives or WiFi dongles, the PBSC may not provide sufficient current. We recommend instead a 5 V power supply rated 2.5 A to 5 A; for example, Opto 22's SNAP-PS5.



Part Numbers

Part	Description
PBSA	5 VDC Power Supply, 120 VAC Input
PBSB	5 VDC Power Supply, 220 VAC Input
PBSC	5 VDC Power Supply, 12/24 VDC Input



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SPECIFICATIONS

	PBSA	PBSB	PBSC
Input Range	105–125 VAC	200–240 VAC	10-28 VDC
Output Voltage	5 VDC	5 VDC	5 VDC
Output Current	0.5 amps	0.5 amps	1.5 amps
Operating Temperature	-25 to 65 °C	-25° to 65 °C	-25° to 65 °C
Isolation Breakdown Voltage	2,500 VAC	2,500 VAC	500 VAC
Power Dissipation	3–9 Watts	3–9 Watts	3–10 Watts
Humidity (non-condensing)	0–95%	0–95%	0–95%
Compatible Brain Boards and Carrier Boards	E1, B1, B100	E1, B1, B100	E1, B1, B5, B100, OPTO-P1-40P
Agency Approvals	CE, RoHS, DFARS	CE, RoHS, DFARS	DFARS
Compatible digital I/O mounting racks (All 3 power supplies are compatible with these racks)	Standard: PB4H, PB8H, PB16H, PB16HC Quad Pak: PB16HQ G4: G4PB8H, G4PB16H, G4PB16HC		
Warranty	30 months from date of manufacture		

INSTALLATION



Because the power supply requires a load to regulate the voltage, no-load



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DIMENSIONAL DRAWINGS



