

BBG-PS-6633

DC Power Supply

Description

The BBG-PS-6633 Rugged Power Supply provides low-voltage DC power with protection against over-voltage, over-current, over-temperature, and inrush conditions. Designed for 110/220 VAC input, it features an internal EMI/EMC filter, user-replaceable fuses, and a standard +24 VDC output at 2 amps, with customizable options available.



Applications

- Electrically and environmentally harsh environments
- Radar Systems (antenna azimuth)
- Navigation Systems (Gyrocompass, speed log, course, pitch, and roll)
- Industrial Processes (position, velocity)
- Meteorology Instruments (wind speed and direction)
- Many Others

Features

- Factory Customizable Inputs and Outputs
- Internal EMI/EMC filter
- Meets MIL-DTL-901E
- Meets MIL-STD-167-1A
- Meets MIL-STD-461G
- User-replaceable fuses

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BBG-PS-6633 Product Specifications



Technical Specifications

Unit Name	Rugged DC Power Supply			
Unit Part Number	BBG-PS-6633			
Parameter	Value			Units
	Min	Nom	Max	
Power Input				
Voltage	90	110	132	VAC
	180	220	264	
Frequency	47	60	63	Hz
Current	-	-	500	mA
Phase	-	-	1	
Isolation	1260	-	-	VDC
Inrush	-	1.5	30	A
Power	-	50	100	W
Outputs				
Voltage*		24		VDC
Current		2		A

* Output voltages ranging from 2 to 48 VDC are available.

Environmental and Physical Characteristics

Environmental Qualifications			
Ambient Temperature	Storage	-4 to 176° F	-20 to 80° C
	Operating	32 to 104° F	0 to 40° C
Shock	MIL-DTL-901E	Grade A, Class 1, Unrestricted Orientation	
Vibration	MIL-STD-167-1A	4-33 Hz Ship's Deck	
Electromagnetic Compatibility	MIL-STD-461G	Submarine, Internal: CE101, CE102, CS101, CS114, RE101, RE102, RS103	
Power Quality/ Personnel Safety	MIL-STD-1399 Section 300B	5.3.1 - Voltage/Frequency Tolerance	
		5.3.2 - Voltage/Frequency Transient Recovery	
		5.3.3 - Voltage Spike Test*	
		5.3.9 - Human Body Leakage	
		LF: 60Hz – 700Hz, <5mA	
		HF: 700Hz – 100kHz, <70mA	
Hi-Pot	Common Mode	1260VDC, 1 Min, <1mA	
Physical Characteristics			

BBG-PS-6633 Product Specifications



Size	Height	4 in	10.16 cm
	Width	8.25 in	20.96 cm
	Depth	1.66 in	4.22 cm
Weight		1.5 lbs.	680.39 g
Heat Dissipation	<100 Watts (Conduction Cooled)		
Material	6061 Aluminum		
Finish	Chem Film (MIL-DTL-5541 Type 2, Class 3)		

* May require manual restart after spike event

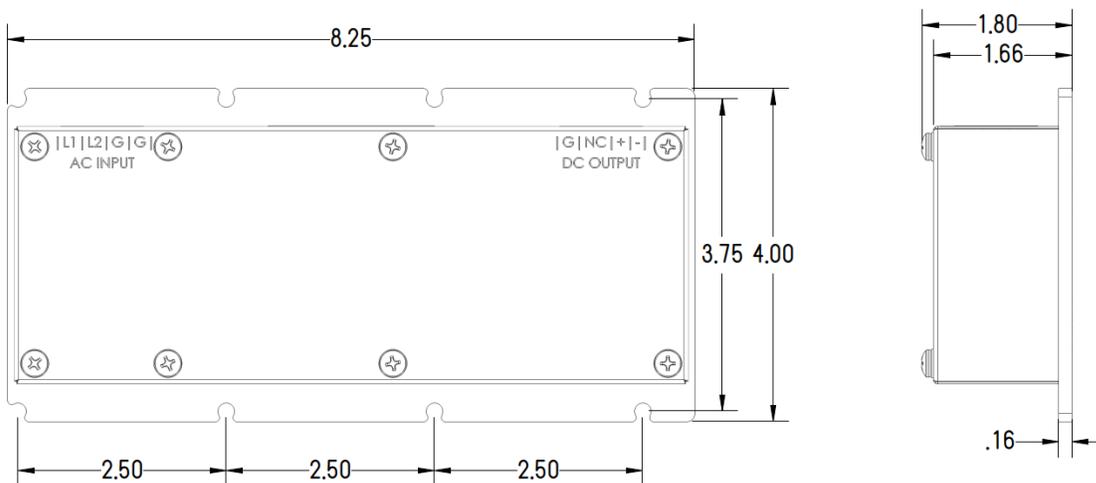
Overview

The BBG-PS-6633 Rugged Power Supply Assembly with integrated EMI filter provides low-voltage DC power for required circuits. It features built-in protection against over-voltage, over-current, over-temperature, and inrush conditions. Additionally, it includes an internal passive EMI/EMC filter designed to minimize conducted noise on the input power connector.

The power supply operates with an input of 115 VAC at 60 Hz, supplied through connector TB1. It is safeguarded by user-replaceable fuses, F1 and F2, located within the power supply to protect against over-voltage and other faults. Spare fuses are stored inside the unit and can be accessed by removing the power supply cover.

In its standard configuration, the power supply delivers +24 VDC at up to 2 amps. Alternative configurations are available upon request, offering input voltages of 110 or 220 VAC and output voltages ranging from 2 to 48 VDC.

Dimensions



Connector List

Inputs and outputs are provided through 4-position shrouded terminal block headers provided with the BBG-PS-6633. Inputs and outputs are listed below:

TB1 AC POWER

Signal	Pin Number
Line 1	1
Line 2	2
GND	3
GND	4

TB2 DC POWER

Signal	Pin Number
GND	1
No Connection	2
DC+	3
DC-	4