

PSU series Power Supply Unit (Lead-Acid Battery)

Description:

The PSU series of Power Supply Unit complies with EN54-4 requirements. It is constant voltage, current limited and float charged to all types of stationary lead-acid batteries.

The PSU series is suitable for all types of standby applications and are capable of supplying the load while recharging or maintaining the batteries in a fully charged condition. The PSU series is ideally suited to fire, utility, industrial, and other standby applications.



Operation:

- **Float Charge Operation**

In normal charging mode, the PSU series maintains the battery at a pre-calibrated charging voltage 27.4V at 20°C while supplying any additional DC load up to the specified current limit.

When fully charged, the battery will only accept the trickle charge required to replace internal losses.

- **Auto Boost-charge Operation**

Auto boost-charge operation provides a temporary increase in output voltage, equalizing the charge between cells and maximizing battery capacity and service life.

Auto boost-charge is triggered automatically when the battery falls below a preset voltage. An auto boost cycle can also be triggered manually via panel push-button. Once the batteries have reached the boost-charge voltage level, PSU series reverts automatically to its normal float charge mode, preventing battery over-charge.



Standards:

- **BS EN 61204-6:2001**

Low voltage power supplies, D.C. output. Requirements for low-voltage power supplies of assessed performance.

- **IEC 61204 Edition 1.1:2001**

Low-voltage power supply devices, D.C. output - Performance characteristics.

- **BS 7430:2011**

Code of Practice for Earthing.

Specification:

MODEL	VG-PSU2405	VG-PSU2410
Dimensions in mm (H x W x D)	400 x 338 x 138	400 x 338 x 138
Input Voltage	195~264VAC	195~264VAC
Input Frequency	47~63Hz	47~63Hz
Output Voltage (DC)	27.4V@20°C	27.4V@20°C
Output Current (DC)	5A	10A
Standby Battery Capacity (maximum)	26Ah	48Ah
Charging Current (DC)	1.1A	2A
Output Voltmeter (7-segment)	Yes	Yes
Output Ammeter (7-segment)	Yes	Yes
Charge Ammeter (7-segment)	Yes	Yes
Mains On (Green LED)	Yes	Yes
Mains Fault (Amber LED)	Yes	Yes
Output Fault (Amber LED)	Yes	Yes
Battery On (Amber LED)	Yes	Yes
Battery Fault (Amber LED)	Yes	Yes
Boost Charge function	Yes	Yes
Boost Charge Time (max.)	8 hrs.	8 hrs.
Buzzer Mute Push-button	Yes	Yes
Lamp Test Push-button	Yes	Yes
Built-in Buzzer	Yes	Yes
Mains Fault Dry Contacts, NO/NC	1A@24VDC	1A@24VDC
System Fault Dry Contacts, NO/NC	1A@24VDC	1A@24VDC
Over Voltage Protection (DC)	30V±1V	30V±1V
Over Current Protection	110~130%	110~130%
Surge Protection (L-N / LN-PE)	≤1KV/2KV	≤1KV/2KV
Operating Temperature	-10°C ~ +50°C	-10°C ~ +50°C
Relative Humidity	≤95% (40°C)	≤95% (40°C)
Construction of Mild Steel Box	1.6mm	1.6mm
Standard Color	Milky white	Milky white