



Brief Information

100W

Waterproof Power Supply

Constant voltage design

Model GDS-PS10012-20

Input 200Vac~240Vac

Output 12VDC@8.33A

INPUT CHARACTERISTICS

- Input Voltage: 200Vac~240Vac
- Input Frequency: 50/60Hz.
- Input Current: 2.0 Amps max at any input voltage and rated, DC output rated load.
- Inrush Current: 80 Amps Max. Cold start at 240Vac input, with rated load and 25°C ambient.
- AC Leakage Current: 3.5 mA Max. At 240Vac input.

OUTPUT CHARACTERISTICS

- Power output

Voltage	Min. Load	Rated. Load	Peak@10mS	Output power
12VDC	0A	8.33A	120W	100W

- Combined Load/Line Regulation

Voltage	Min. Load	Rated. Load	Line Regulation	Load Regulation
12VDC	0A	8.33A	±3%	±5%

- **Ripple and Noise:** Under nominal voltage and nominal load, the ripple and noise are as follows when measure with Max. Bandwidth of 20MHz and Parallel 47uF/0.1uF, crossed connected at testing point.

Voltage : 12VDC

Ripple and Noise (Max.) : 200mV p-p

- Turn on delay time : 2Second Max. at 220Vac input and output Max. Load.
- Rise time: 800 mS Max. at 220Vac input and output Max load.
- Efficiency: 88% Min, At 220Vac input voltage and full load calculation efficiency.
- Overshoot: 10% Max. When power supply at turn on or turn off.

PROTECTION FUNCTION:

- **Short circuit protection:** The power supply will be auto recovered when short circuit faults remove.
- **Over current Protection :** The power supply will be auto recovered when over current faults remove.
- **Over voltage Protection :** The Power supply will lock when over voltage, must close and restart AC Source.

ENVIRONMENTAL REQUIREMET:

- **Operating Temperature:** -20°C to 40 °C , Full load, Normal operation.
- **Storage Temperature:-** 20°C to 80 °C
- **Storage Temperature:-** 20°C to 80 °C With package
- **Relative Humidity:** 5%(0 °C)~90%(40 °C)RH, 72Hrs, Full load, Normal operating.

- **Vibration:**
 - 1) Operating: IEC 721-3-3 3M3 5~9Hz, A=1.5mm(9~200Hz, Acceleration 5m/S²)
 - 2) Transportation: IEC 721-3-2 2M2 5-9Hz, A=3.5mm 9~200Hz, Acceleration=5m/S² 200~500Hz Acceleration=15m/S
 - 3) 2Axes, 10 cycles per axis. No permanent damage may occur during testing. The SAMPLE has to restore to its original situation after power off/on..
- **Dropping Packed:** Desktop instrument for testing 600mm /-10mm, wooden floors.

SAFETY AND EMI REQUIREMENT:

- **Safety:** Design by IEC60950-1 standard.
- **DIELECTRIC STRENGTH Hi-Pot:**
 - Primary to secondary: 1500Vac/10mA/60S for type test.
 - Primary to case: 1200Vac/10mA/60S for type test.
 - Secondary to case: 300Vac/10mA/60S for type test.
- **Insulation resistance:** Primary to secondary: 10MΩ min at 500V DC.
- **EMI STANDARD:** Designed according to the following standards
 - <1>. FCC class B rules
 - <2>. EN55022 class B rules
 - <3>. GB9254-1998, GB17625.1-2003

Conditions to ensure product performance in line with this acknowledgment, the Company reserves the right to make changes to optimize product circuits and components.

MECHANICAL REQUIREMENT

- Size: 234mm*53mm*22mm
- Weight: 240g

