

NSP-Series

100W Switched Mode Power Supply



Description

This series of 100W Switched Mode Power Supplies, with Constant Current Limit Control, is designed with the objectives of high accuracy, compactness and portability.

4 digit display LCD of voltage and current for high precision. The slim tower housing makes it ideal for a tight work space. It is light and conveniently portable with a collapsible carry handle.

The large and illuminated LCD display provides clear and sharp display even under dim light. The output power on/off switch allows for safe and convenient operation. The Tracking OVP (Output Over Voltage Protection) allows better and tighter protection for voltage sensitive loads. It has good line and load regulation, high efficiency and low ripple & noise that are typical of advanced switch mode power supplies.

It meets the CE safety standards of EN-61010 for laboratory grade power supply and respective EMC standards.

Features

- Automatic Cross over between CV and CC modes
- Illuminated LCD indications of A, V, Output ON-OFF, CC & CV.
- 4 digit display of Volt and Amp meters
- Voltage and Current controls
- Compact slim tower housing
- Collapsible carry handle
- Output power on/off switch on front panel
- Natural Convection Cooling - no fan
- Tracking OVP (Over Voltage Protection), Short Circuit, Overload and Over Temperature Protection.
- Excellent line, load regulation and low ripple and noise
- Rotary encoder controls
- CE approvals

Specifications

Model	NSP-2050	NSP-3630	NSP-6016
Input Voltage	100~120VAC or 200~240VAC, 50/60Hz (internal jumper selection)		
Full Load Input Current at 230VAC	0.83A		
Output Voltage Adjustable Range	1~20VDC	1~36VDC	1~60VDC
Output Current Adjustable Range	0.25~5A	0.25~3A	0.25~1.6A
Voltage Regulation			
Load Regulation (10~100%)	70mV	50mV	50mV
Line Regulation (180~264VAC)	20mV		
Ripple & Noise rms	≤5mV		
Ripple & Noise (peak to peak)	≤30mV	≤50mV	≤50mV
Current Regulation			
Load Regulation (10~100%)	20mA		
Line Regulation (180~264VAC)	20mA		
Ripple & Noise (peak to peak)	≤20mA		
Switching Frequency	80~120kHz		
Power Factor	>0.65		
Efficiency at Maximum Power	≥80.5%	≥83%	≥84%
Display	4 digit LCD		
Voltage Meter Accuracy	±0.5% +5counts for range V≤5V ±0.5% +3counts for range V>5V	±0.5% +5counts for range V≤10V ±0.5% +3counts for range V>10V	±0.5% +5counts for range V≤20V ±0.5% +3counts for range V>20V
Current Meter Accuracy	±0.5% +5counts for range I≤2A ±0.5% +3counts for range I>2A	±0.5% +5counts for range I≤1A ±0.5% +3counts for range I>1A	±0.5% +5counts for range I≤0.5A ±0.5% +3counts for range I>0.5A
LCD Indication	CC, CV, Amp, Volt, Output on/off		
Protection	Short Circuit, Overload, Over Temperature, Tracking OVP		
Approvals	CE EMC: EN55011 LVD: EN61010		
Cooling System	Natural Convection		
Dimensions (WxHxD)	70x150x250mm 2.8x6x9.8in		
Weight	Approx. 2kg 4.4lb		

- All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.
- SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE