

LABORATORY GRADE POWER SUPPLY with C.C. Control

NRP-Series, NSP-Series



Description

This series of 100W Switching Mode Power Supplies with Current Limiting Control, is designed with the objectives of cost effectiveness, compactness and easy portability.

4digit display LCD of voltage and current for high precision. (for NSP-Series only)

The slim tower housing makes it ideal for tight work bench. It is light and conveniently portable with a collapsible handle.

The large and illuminated LCD display provides clear and sharp readings even under dim light. The output power on off switch allows safe and handy operations. The Tracking OVP (Output Over Voltage Protection) ensures a better and tighter protection to voltage sensitive loads. It has good line and load regulations, high efficiency and low ripple & noise that are typical of advanced switching mode power supply.

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

Features

- Open circuit current limiting setting capability (for NSP-Series only).
- Automatic Cross over CV and CC mode.
- Illuminated LCD indications of A, V, Output On-OFF, CC & CV.
- 4 digit displays of Volt and Amp meters (for NSP-Series only).
- 3digit displays of Volt and Amp meters.
- Coarse & Fine Voltage and Current controls (for NSP-Series only).
- Voltage and Current controls.
- Compact slim tower housing.
- Collapsible handle.
- Output power on off switch at front panel.
- Natural Convection.
- Tracking OVP (output over voltage protection), Short circuit, overload and over temperature protections.
- Good line, load regulations and low ripple and noise.
- Rotary encoder control (for NSP-Series only).
- CE approvals.

General Specifications

Input Voltage (Jumper selection)	200-240VAC, 50/60Hz~ (or on request)
Full Load Input Current (230VAC)	0.83A
Display	4digit LCD (for NSP-Series only) ; 3digit LCD (for NRP-Series only)
LCD Indication	C.C., C.V., Amp, Volt., output on/off
Protection	Short Circuit, Overload, Over Temperature, Tracking OVP
Approvals	CE EMC: EN 55011 LVD: EN 61010
Cooling System	Natural Convection
Dimension (WxHxD)	70x150x250 mm 2.8x6x9.8 inch
Weight	Approx. 2 kgs 4.4 lbs

* All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.

* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

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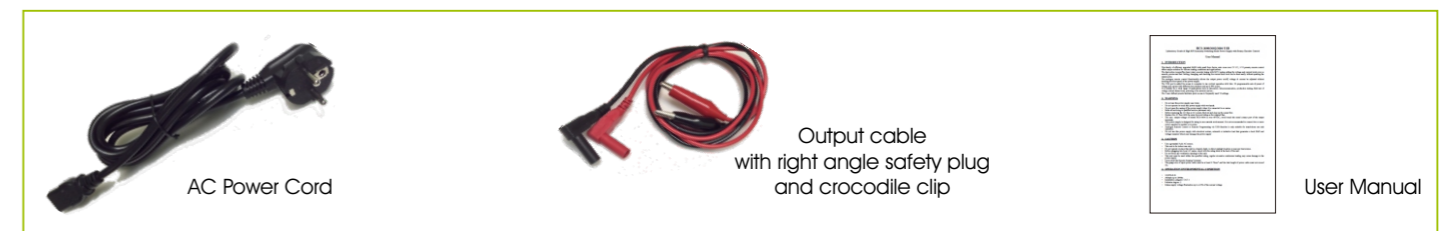
NRP-Series, NSP-Series

Specifications

Models	NRP-2050	NRP-3630	NRP-6016
Output			
Variable Output Voltage	1-20VDC	1-36VDC	1-60VDC
Variable Output Current	0-5A	0-3A	0-1.6A
Voltage Regulation			
Load from 10-90% Variation	≤50mV		
Line from 180-264VAC Variation	≤20mV		
Ripple & Noise (r.m.s.)	≤5mV		
Ripple & Noise (peak-peak)	≤30mV	≤50mV	≤50mV
Current Regulation			
Load from 10-100% Variation	≤20mA		
Line from 180-264VAC Variation	≤20mA		
Ripple & Noise (peak-peak)	≤20mA		
Switching Operation Frequency	80-120KHz~		
Power Factor	>0.68		
Efficiency at Maximum Power	≥81%	≥84%	≥82%
Volt. Meter Accuracy	±1% +5counts for range V≤5V ±1% +3counts for range V>5V	±1% +5counts for range V≤10V ±1% +3counts for range V>10V	±1% +5counts for range V≤20V ±1% +3counts for range V>20V
Curr. Meter Accuracy	±1% +5counts for range I≤2A ±1% +3counts for range I>2A	±1% +5counts for range I≤1A ±1% +3counts for range I>1A	±1% +5counts for range I≤0.5A ±1% +3counts for range I>0.5A

Models	NSP-2050	NSP-3630	NSP-6016
Output			
Variable Output Voltage	1-20VDC	1-36VDC	1-60VDC
Variable Output Current	0.25-5A	0.25-3A	0.25-1.6A
Voltage Regulation			
Load from 10-90% Variation	≤70mV	≤50mV	≤50mV
Line from 180-264VAC Variation	≤20mV		
Ripple & Noise (r.m.s.)	≤5mV		
Ripple & Noise (peak-peak)	≤30mV	≤50mV	≤50mV
Current Regulation			
Load from 10-100% Variation	≤20mA		
Line from 180-264VAC Variation	≤20mA		
Ripple & Noise (peak-peak)	≤20mA		
Switching Operation Frequency	80-120KHz~		
Power Factor	>0.68		
Efficiency at Maximum Power	≥80.5%	≥83%	≥84%
Volt. 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
Curr. 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

Accessories



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