

LABORATORY GRADE POWER SUPPLY with C.C. CONTROL

NTP-5000 Series

Description

This series of 100W Switching Mode Power Supplies with Current Limiting Control, is designed with the objectives of high accuracy, compactness and easy portability. The use of digital power techniques results in capabilities and performance levels at the power supply that are not possible with analog techniques. Digital power techniques can control the turn-on slew rate of the power MOSFET in response to the output load thus further reducing EMI. 4 digit display LCD of voltage and current for high precision. 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.
- Automatic Cross over CV and CC mode.
- Illuminated LCD indications of A, V, Output On-Off, CC & CV.
- 4digit displays of Volt and Amp meters for main output.
- Two auxiliary fixed: 12VDC & 3.3V/5VDC selectable output. (only for NTP-5521, 5531, 5561)
- Two auxiliary USB output. (only for NTP-5621, 5631, 5661)
- 2digit displays of Amp meters for auxiliary fixed outputs. (only for NTP-5521, 5531, 5561)
- 2digit displays of Amp meters for auxiliary USB outputs. (only for NTP-5621, 5631, 5661)
- Coarse & Fine 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.
- Universal input with active PFC.
- Good line, load regulations and low ripple and noise.
- Rotary encoder control.
- CE approvals.

General Specifications

Input Voltage	100-240VAC, 50/60Hz~ (or on request)
Full Load Input Current (230VAC)	0.83A
Display	4digit LCD
Volt. Meter Accuracy (Main Output)	5counts for range $V < 5V \pm 0.2\%$ +5counts for range $V \geq 5V$
Curr. Meter Accuracy (Main Output)	15counts for range $I \leq 1A \pm 0.5\%$ +6counts for range $I > 1A$
LCD Indication	C.C., C.V., Amp, Volt., output on/off, Aux Output Current
Protection	Short Circuit, Overload, Over Temperature, Tracking OVP
Approvals	CE EMC: En55011 LVD: EN61010
Cooling System	Natural Convection
Dimension (WxHxD)	70x155x250 mm 2.8x6x9.8 inch
Weight	Approx. 2 kg 4.4 lbs

Accessories



AC Power Cord

Output cable with right angle safety plug and crocodile clip

User Manual

* 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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Specifications

Models	NTP-5521	NTP-5531	NTP-5561
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		
Line from 90-264VAC Variation	25mV		
Ripple & Noise (peak-peak)	≤120mV	≤150mV	≤180mV
Current Regulation			
Load from 10-90% Variation	50mA		
Line from 90-264VAC Variation	20mA		
Ripple & Noise (peak-peak)	≤50mV		
Switching Operation Frequency	50-150KHz~		
Aux. Output 1	Fixed 3.3/ 5VDC, 1.8A Continuous, 2A Maximum		
Aux. Output 2	Fixed 12VDC, 800mA Continuous, 1A Maximum		
Power Factor	>0.9		
Efficiency at Maximum Power	≥80.5%		

Models	NTP-5621	NTP-5631	NTP-5661
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		
Line from 90-264VAC Variation	25mV		
Ripple & Noise (peak-peak)	≤120mV	≤150mV	≤180mV
Current Regulation			
Load from 10-90% Variation	50mA		
Line from 90-264VAC Variation	20mA		
Ripple & Noise (peak-peak)	≤50mV		
Switching Operation Frequency	50-150KHz~		
Aux. USB Output 1 & 2	5VDC, 1.8A Maximum		
Power Factor	>0.9		
Efficiency at Maximum Power	≥80.5%		

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