

# PROGRAMMABLE LABORATORY GRADE POWER SUPPLY

NTP-8000 Series

## Description

This NTP-85XX series of 100W Remote Programming Switching Mode Power Supplies with 3 isolated outputs, which can be used simultaneously, in combination, and independently. The variable output is fully programmable via standard USB interface. It comes with an application PC software for remote programming and cyclic tests, Command Sets, and latest Python library for Window and Linux platform. Both novice and advanced users will find this power supply highly adaptable and easy to use. The first auxiliary output has two selectable voltage making a total of 3 voltages (3.3V/ 5V & 12V) from 2 auxiliary outputs. Each auxiliary output has its own ammeter.

This NTP-86XX series of 100W Remote Programming Switching Mode Power Supplies with 1 variable, Type C and 5V USB auxiliary outputs. The variable output is fully programmable via standard USB control interface. It comes with an application PC software for remote programming and cyclic tests, Command Sets, and latest Python library for Window and Linux platform. Both novice and advanced users will find this power supply highly adaptable and easy to use. USB auxiliary outputs provide maximum 2Amp and 3Amp current. They are ideal for as USB power sources for DIY electronics such as Raspberry Pi and Arduino or as USB charging. Each output has its own ammeter for monitoring the current consumption of your electronic device.

The variable output has 4digit display LCD of voltage and current. 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

- 3 isolated outputs with one selectable voltage, one fixed voltage and one variable voltage.
- 1 variable output plus Type C which can output 5/ 9/ 12V and USB 3.0 5V auxiliary output. (for NTP-8621, 8631, 8661)
- Auxiliary 1 has selectable 3.3/ 5V and Auxiliary 2 has 12V. (for NTP-8521, 8531, 8561)
- Separate 2digit ammeter for each fixed voltage output. (for NTP-8521, 8531, 8561)
- Separate digit ammeter for each USB output. (for NTP-8621, 8631, 8661)
- 4digit LCD voltage and current meters for the variable output.
- Remote Programmable via USB for the variable output.
- Supplied with application software for cyclic operations, command sets, and Python library.
- Automatic Cross over CV and CC mode .
- Illuminated LCD indications of A, V, Output On-OFF, CC & CV.
- Coarse & Fine Voltage and Current controls with Rotary encoder control.
- Collapsible handle.
- Output power on off switch at front panel .
- Natural Convection Cooling.
- Tracking OVP (output over voltage protection), Short circuit, overload and over temperature protections.
- Good line, load regulations and low ripple and noise.
- CE approvals.

## General Specifications

Input Voltage	220-240VAC, 50/60Hz~ (or on request)
Full Load Input Current (230VAC)	0.83A
Display	4digit LCD
Volt. Meter Accuracy (Main Output)	5counts for range $V < 5V \pm 0.1\%$ +5counts for range $V \geq 5V$
Curr. Meter Accuracy (Main Output)	8counts for range $I \leq 1A \pm 0.2\%$ +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
Connectivity	Bundle USB
Programming Language Library	Python
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

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

\* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

# PROGRAMMABLE LABORATORY GRADE POWER SUPPLY

NTP-8000 Series



NTP-8500 Series



NTP-8600 Series

## Specifications

Models	NTP-8521	NTP-8531	NTP-8561
<b>Output</b>			
Variable Output Voltage	0.8-20VDC	0.8-36VDC	0.8-60VDC
Variable Output Current	0.1-5A	0.1-3A	0.1-1.6A
<b>Voltage Regulation</b>			
Load from 10-90% Variation	≤40mV		
Line from 90-264VAC Variation	≤10mV		
Ripple & Noise (peak-peak)	≤100mV	≤100mV	≤120mV
<b>Current Regulation</b>			
Load from 10-90% Variation	≤30mA		
Line from 90-264VAC Variation	≤10mA		
Ripple & Noise (peak-peak)	≤30mA		
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	Passive PFC		
Efficiency at Maximum Power	≥80.5%		

Models	NTP-8621	NTP-8631	NTP-8661
<b>Output</b>			
Variable Output Voltage	0.8-20VDC	0.8-36VDC	0.8-60VDC
Variable Output Current	0.1-5A	0.1-3A	0.1-1.6A
<b>Voltage Regulation</b>			
Load from 10-90% Variation	≤40mV		
Line from 90-264VAC Variation	≤10mV		
Ripple & Noise (peak-peak)	≤100mV	≤100mV	≤120mV
<b>Current Regulation</b>			
Load from 10-90% Variation	≤30mA		
Line from 90-264VAC Variation	≤10mA		
Ripple & Noise (peak-peak)	≤30mA		
Switching Operation Frequency	50-150KHz~		
Aux. USB Output 1: Type C & 2: USB 3.0	Output 1: Type C which can output 5V(3A), 9V(2A), 12V(1.6A) ; Output 2: USB 3.0 5V(2A)		
Power Factor	Passive PFC		
Efficiency at Maximum Power	≥80.5%		

## Accessories



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