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<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 0.1 Mpa. * SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE



NTP-8000 Series



NTP-8500 Series

	NTP-8521	NTP-8531	NTP-8561	
Output				
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	
Voltage Regulation				
Load from 10-90% Variation	≤40mV			
Line from 90-264VAC Variation	≤10mV			
Ripple & Noise (peak-peak)	≤100mV	≤100mV	≤120mV	
Current Regulation				
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-6631	NTP-8661	
Output	111 0021			
•	0.8-20VDC	0.8-36VDC	0.8-60VDC	
variaple output voltade				
Variable Output Voltage Variable Output Current				
Variable Output Current	0.1-5A	0.1-3A	0.1-1.6A	
Variable Output Current Voltage Regulation	0.1-5A			
Variable Output Current Voltage Regulation Load from 10-90% Variation Line from 90-264VAC Variation	0.1-5A ≤40mV			
Variable Output Current Voltage Regulation Load from 10-90% Variation	0.1-5A ≤40mV ≤10mV	0.1-3A	0.1-1.6A	
Variable Output Current Voltage Regulation Load from 10-90% Variation Line from 90-264VAC Variation Ripple & Noise (peak-peak)	0.1-5A ≤40mV ≤10mV ≤100mV	0.1-3A	0.1-1.6A	
Variable Output Current Voltage Regulation Load from 10-90% Variation Line from 90-264VAC Variation Ripple & Noise (peak-peak) Current Regulation	0.1-5A ≤40mV ≤10mV	0.1-3A	0.1-1.6A	
Variable Output Current Voltage Regulation Load from 10-90% Variation Line from 90-264VAC Variation Ripple & Noise (peak-peak) Current Regulation Load from 10-90% Variation	0.1-5A ≤40mV ≤10mV ≤100mV ≤30mA	0.1-3A	0.1-1.6A	
Variable Output Current Voltage Regulation Load from 10-90% Variation Line from 90-264VAC Variation Ripple & Noise (peak-peak) Current Regulation Load from 10-90% Variation Line from 90-264VAC Variation	0.1-5A ≤40mV ≤10mV ≤100mV ≤30mA ≤10mA	0.1-3A	0.1-1.6A	
Variable Output Current Voltage Regulation Load from 10-90% Variation Line from 90-264VAC Variation Ripple & Noise (peak-peak) Current Regulation Load from 10-90% Variation Line from 90-264VAC Variation Ripple & Noise (peak-peak)	0.1-5A ≤40mV ≤10mV ≤100mV ≤30mA ≤30mA ≤30mA 50-150KHz~	0.1-3A ≤100mV	0.1-1.6A	
Variable Output Current Voltage Regulation Load from 10-90% Variation Line from 90-264VAC Variation Ripple & Noise (peak-peak) Current Regulation Load from 10-90% Variation Line from 90-264VAC Variation Ripple & Noise (peak-peak) Switching Operation Frequency	0.1-5A ≤40mV ≤10mV ≤100mV ≤30mA ≤30mA ≤30mA 50-150KHz~	0.1-3A ≤100mV	0.1-1.6A ≤120mV	



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PROGRAMMABLE LABORATORY GRADE POWER SUPPLY



NTP-8600 Series