



Datasheet

UDP6720 Series Programmable DC Power Supply

V1.1

September 2024

1. Characteristics

- 4.3 inch TFT-LCD, simple and easy operation panel
- High resolution and low ripple
- OVP/OCP/OTP protection
- Remote sensing function
- List, delayer function, simulate various on load situations
- Waveform display of voltage, current and power
- Intelligent regulation fans
- Multiple interfaces: RS232/RS485, LAN, USB Host and USB Device
- Supports SCPI/MODBUS protocol

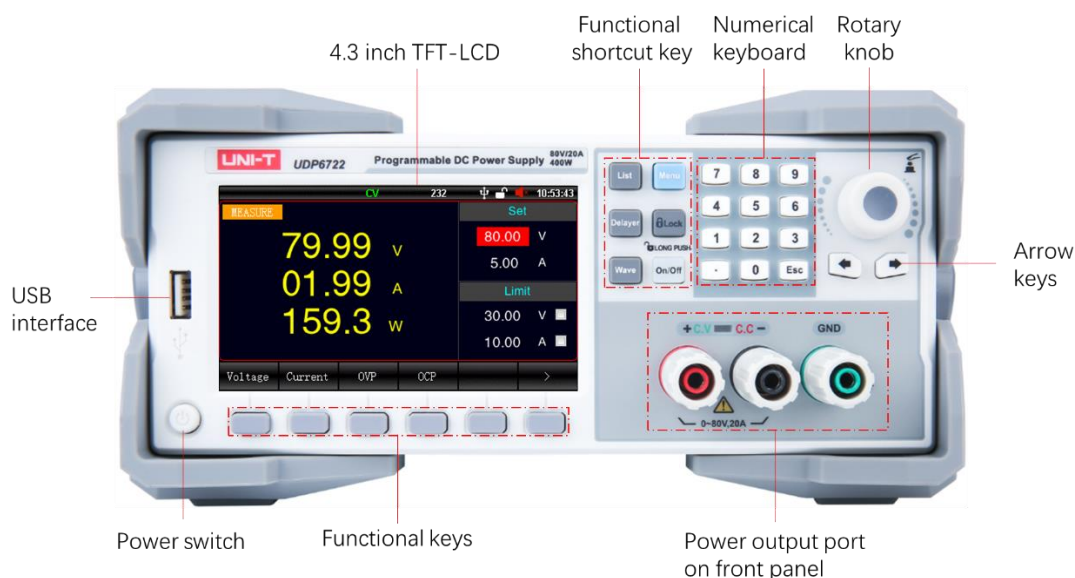
2. Product Introduction

UDP6720 Series programmable DC power supply is switching power supply with wide span. The model is small, light and powerful. It adopts LCD, so the parameter can be display directly and easy to use; the product can be applied to the field of automatic test system, R&D, laboratory, teaching experiment, phone and home appliances maintenance.

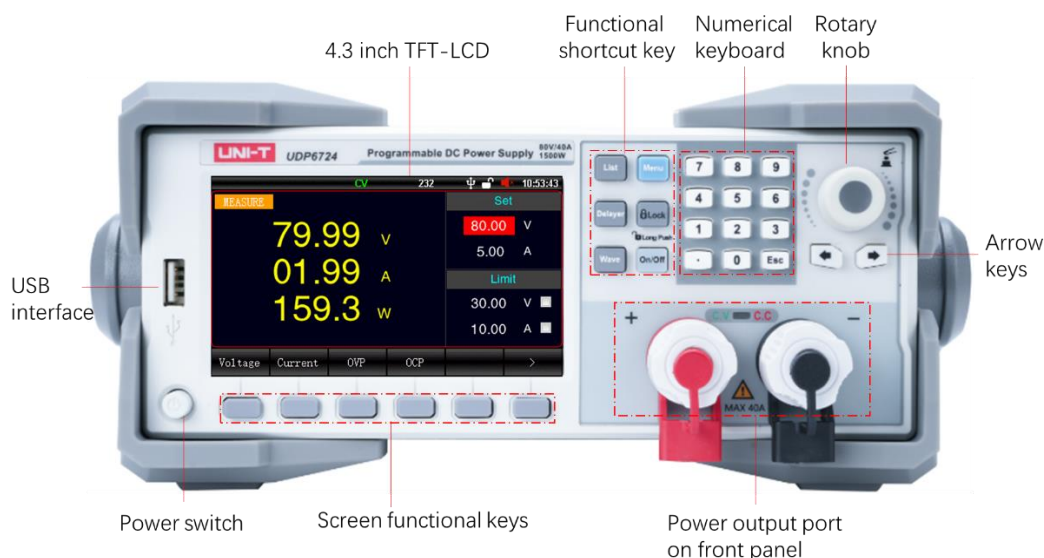
Model	Output Range	Input Range	Specification of Fuse
UDP6722	0V-80V, 0A-20A, 0W-400W	200-240V AC	250V/T5A
UDP6723	0V-80V, 0A-40A, 0W-850W		250V/T15A
UDP6724	0V-80V, 0A-40A, 0W-1500W		

Front Panel:

UDP6722:



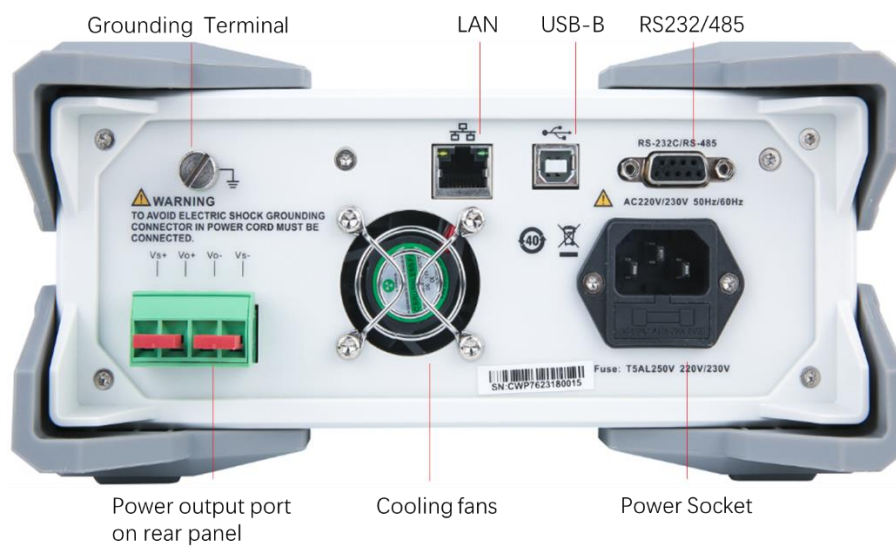
UDP6723/UDP6724



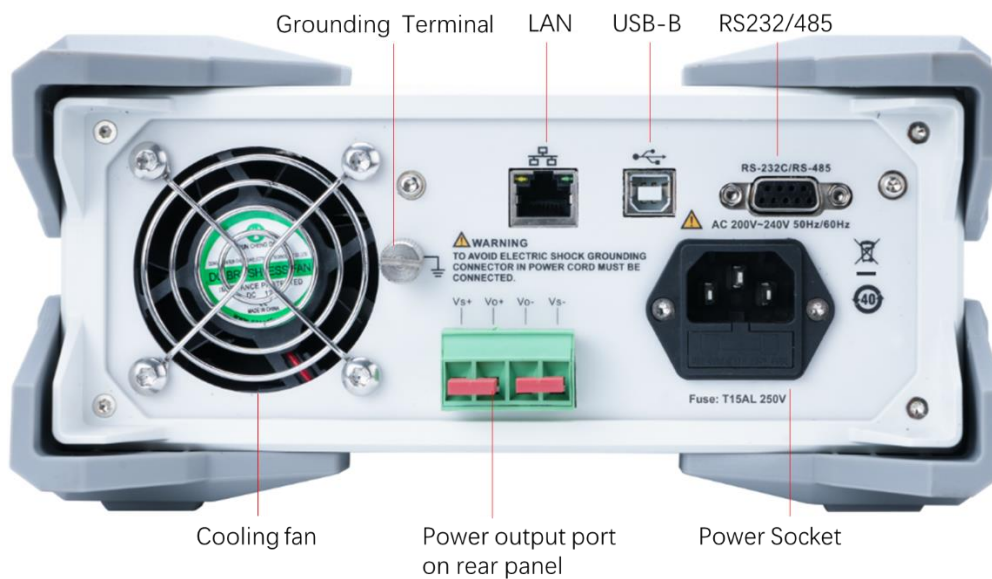
For more details, please refer to UDP6720 Series Programmable DC Power Supply User Manual.

Rear Panel:

UDP6722



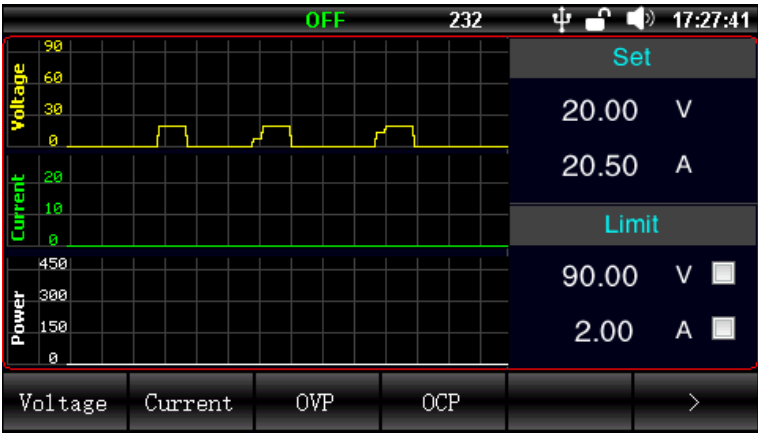
UDP6723/UDP6724



For more details, please refer to UDP6720 Series Programmable DC Power Supply User Manual.

3. Design Highlights

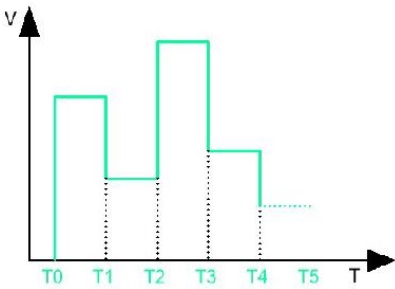
Waveform Display



The instrument can display the waveform of voltage, current and power. If the waveform changes, the changing will directly display on the screen.

List Function

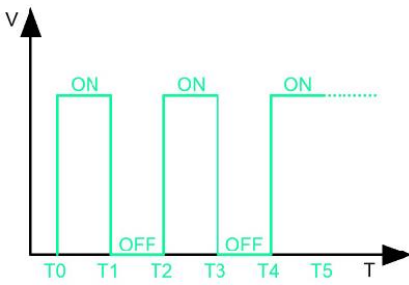
SETUP	LIST	DELAVER	No.	Volt/V	Curr/A	Time/s
FileNum	File:1		0	3.00	1.00	1.0
Start	000		1	1.50	1.00	1.0
Group	199		2	4.00	1.00	1.0
Repeat	0001		3	2.00	1.00	1.0
Finish	Stop		4	1.00	1.00	1.0
Enable	Off		5	1.00	1.00	1.0
			6	1.00	1.00	1.0
			7	1.00	1.00	1.0
			8	1.00	1.00	1.0
			9	1.00	1.00	1.0



The list mode supports the maximum setting of 200 steps, and each step can set the voltage and current and the output time by user. It meets the various output needs. The list can loop or terminate after the output is completed.

Delayer Function

SETUP	LIST	DELAVER	No.	On/Off	Time/s
FileNum	File:0		0	On	1.0
Start	000		1	Off	1.0
Group	199		2	On	1.0
Repeat	0001		3	Off	1.0
Finish	Stop		4	On	1.0
Enable	Off		5	Off	1.0
			6	On	1.0
			7	Off	1.0
			8	On	1.0
			9	Off	1.0



The delayer mode supports the maximum setting of 200 steps. Compare to the list mode, the delayer mode only has output mode and stop output mode. The output mode is to output the current parameter, it simplifies the user setup.

4. Technical Index

Rated output voltage	0~80V
Rated output current	0~20A
Output power	400W
Load regulation	Voltage: <0.01%+10mV
	Current: <0.1%+5mA
Power regulation	Voltage: <0.01%+2.5mV
	Current:<0.1%+2.5mA
Setting Resolution	Voltage: 10mV
	Current: 10mA
Setting Accuracy (25°C±5°C)	Voltage: <0.01%+20mV
	Current:<0.1%+10mA
Readback resolution	Voltage: 10mV
	Current: 10mA
Readback accuracy (25°C±5°C)	Voltage: <0.01%+20mV
	Current:<0.1%+20mA
Ripple and noise (20Hz~20MHz)	Voltage: <50mVp-p
	Current: <15mA _{rms}
Temperature coefficient	0.02%/°C+10mV
	0.03%/°C+10mA
Storage	100
List function	40*200
Display mode	4.3"TFT LCD
Interface	RS232/RS485/USB Host/USB Device/LAN
USB	√
Communication protocol	SCPI/MODBUS
Power voltage	AC 220V±10%
Frequency	50Hz/60Hz
Size (W×H×D)	214X88X393mm
Weight	4.65 kg

Model	UDP6723	UDP6724
Rated output voltage	0~80V	
Rated output current	0~40A	
Output power	850W	1500W
Load regulation $\pm$ (% of Output+Offset)	Voltage: <0.01%+10mV	
	Current: <0.1%+10mA	
Power regulation $\pm$ (% of Output+Offset)	Voltage: <0.01%+10mV	
	Current: <0.1%+10mA	
Setting Resolution	Voltage: 10mV	
	Current: 10mA	
Setting Accuracy (25°C $\pm$ 5°C) $\pm$ (% of Output+Offset)	Voltage: <0.03%+20mV	
	Current: <0.1%+40mA	
Readback resolution	Voltage: 10mV	
	Current: 10mA	
Readback accuracy (25°C $\pm$ 5°C) $\pm$ (% of Output+Offset)	Voltage: <0.03%+20mV	
	Current: <0.1%+40mA	
Ripple and noise (20Hz~20MHz)	Voltage: <100mVpp	
	Current: <50mA _{rms}	
Temperature coefficient (%Output/°C+Offset)	Voltage: 0.02%/°C+10mV	
	Current: 0.03%/°C+20mA	
Rise time (light load)	<0.3S	
Rise time (full load)	<0.5S	
Fall time (light load)	<5S	
Fall time (full load)	<0.15S	
Transient Response	<500uS	

Readback	Voltage: 0.01%+10mV	
Temp.coefficient (%Output/°C+Offset)	Current: 0.03%+20mA	
Setting stability-30min	Voltage: 0.03%+20mV	
	Current: 0.1%+40mA	
Setting stability-8h	Voltage: 0.03%+20mV	
	Current: 0.1%+40mA	
Readback stability-30min	Voltage: 0.03%+20mV	
	Current: 0.1%+40mA	
Readback stability-8h	Voltage: 0.03%+20mV	
	Current: 0.1%+40mA	
Protection	OVP/OCP/OTP	
Storage	100	
List Function	40*200	
Screen	4.3"TFT LCD	
Interface	RS232/RS485/USB Host/USB Device/LAN	
USB	√	
Protocol	SCPI/MODBUS	
Power Voltage	220V ±10%	220V ±10%
Frequency	47~63Hz	
Size(W×H×D)	475*215*88mm	
Weight	5.9kg	
Efficiency	84%	88%
Fuse	15A	
PF	0.98	
Max Input Current	10A	
Maximum Apparent Power	1100VA	2000VA
Withstand Voltage	500V	

5. Accessories

Article	Quantity	Remarks
DC power supply	1 pcs	including square hole plug and short circuit plate
Power cord	1 pcs	
RS232 communication line	1 pcs	
Dual-Head Print Cable	1 pcs	
Spare fuse	2 pcs	
Certificate of Calibration	1 pcs	
Quick Start Guide	1 pcs	
User's Manual	0 pcs	Electronic user's manual can download from the official website.

6. Optional Accessories

Model	Description	Picture	Applicable Model
UT-L0615-00	Double O type terminal 60A/1.5m power supply/electronic load test wire		UDP6723&24
UT-L0320-UU	Double U-type terminal 30A/2m power supply/electronic load test wire		UDP6722&23&24
UT-L0312-UU	Double U-type terminal 30A/1.2m power supply/electronic load test wire		UDP6722&23&24

UT-L0110-BB	Double Fold insert 10A/1m power supply/electronic load test wire		UDP6722&23&24
UT-L0110-BU	Fold insert-U type terminal 10A/1m power supply/electronic load test wire		UDP6722&23&24

Limited Warranty and Liability

Uni-T guarantees that the Instrument product is free from any defect in material and workmanship within three years from the purchase date. This warranty does not apply to damages caused by accident, negligence, misuse, modification, contamination or improper handling. If you need warranty service within the warranty period, please contact your seller directly. Uni-T will not be responsible for any special, indirect, incidental or subsequent damage or loss caused by using this device. For the probes and accessories, the warranty period is one year. Visit instrument.uni-trend.com for full warranty information.



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