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Datasheet

UDP6720 Series Programmable DC Power Supply

V1.3

July 2025

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.

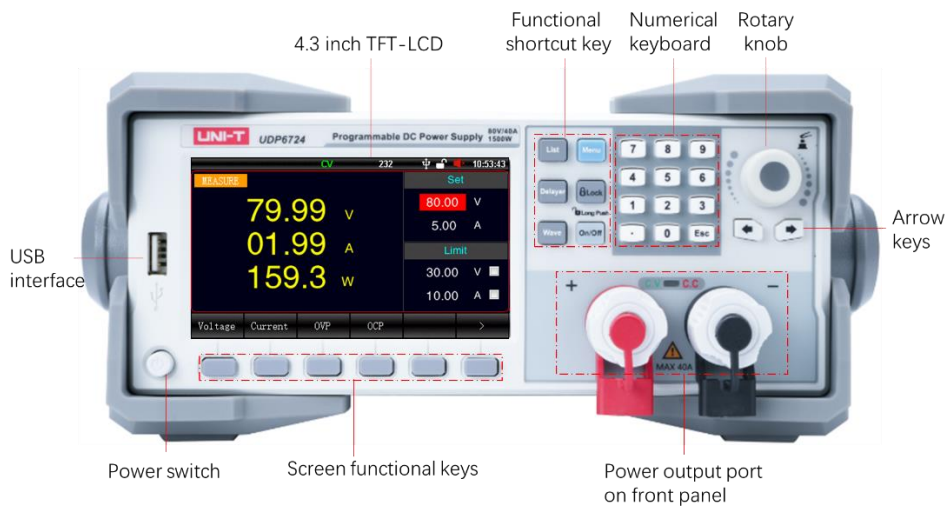
Model	Output Range	Input Range	Specification of Fuse
UDP6722	0V-80V, 0A-20A, 0W-400W	200-240V AC	250V/T5A
UDP6723	0V-80V, 0A-40A, 0W-850W		250V/T15A
UPD6724	0V-80V, 0A-40A, 0W-1500W		
UDP6723B	0V-150V, 0A-20A, 0W-850W		
UDP6724B	0V-150V, 0A-20A, 0W-1500W		
UDP6723G	0V-600V, 0A-5A, 0W-850W		
UDP6724G	0V-600V, 0A-5A, 0W-1500W		

Front Panel:

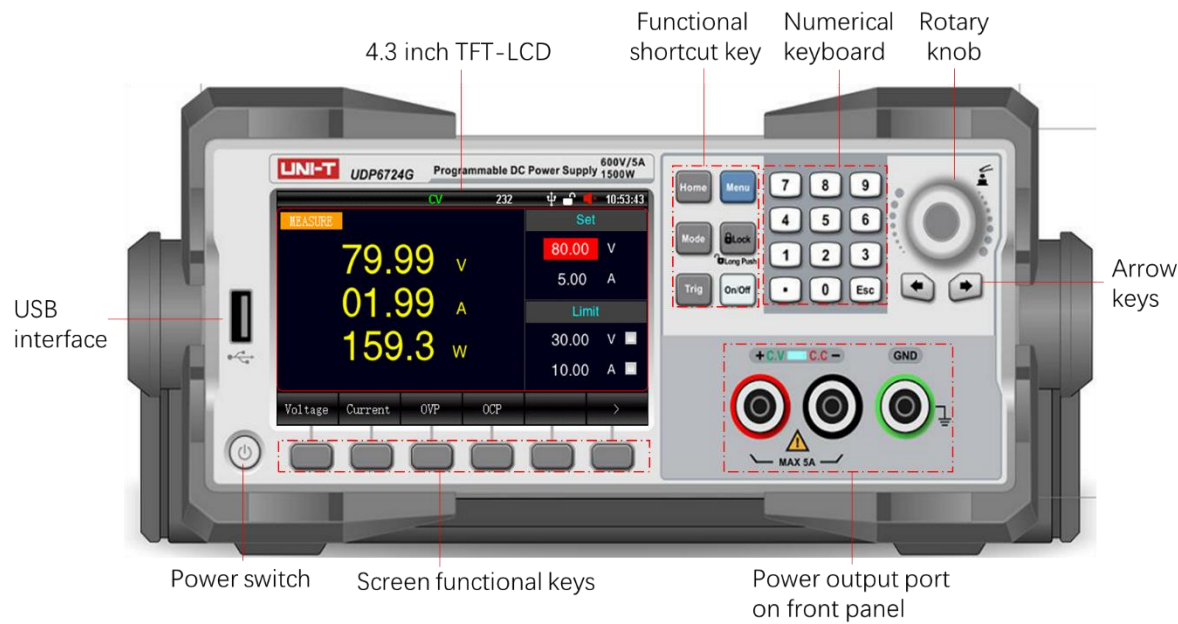
UDP6722:



UDP6723/UDP6724/UDP6723B/UDP6724B



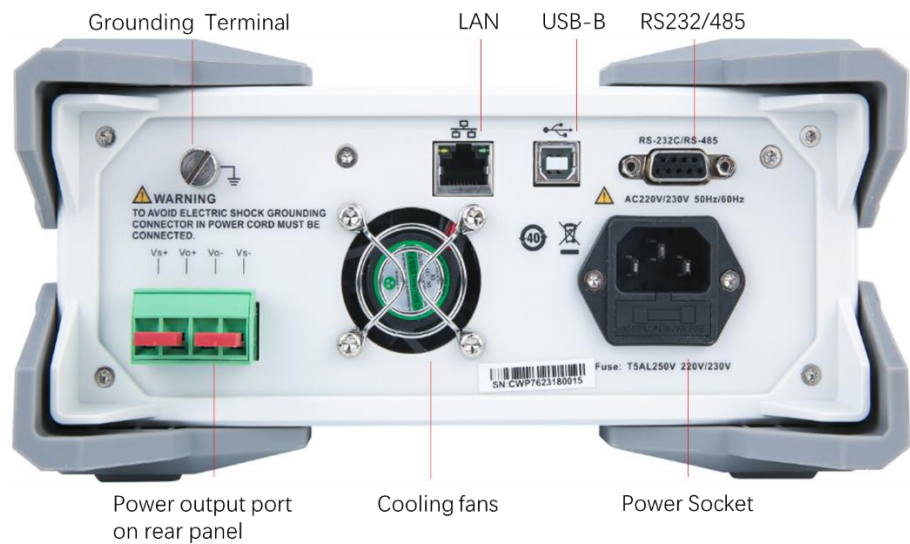
UDP6723G/UDP6724G



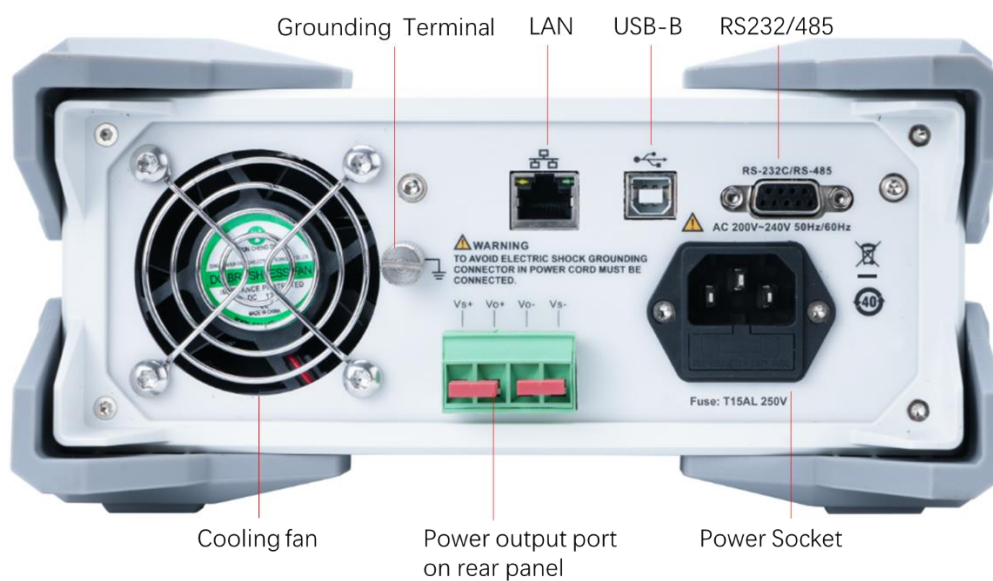
For more details, please refer to UDP6720 Series Programmable DC Power Supply User Manual.

Rear Panel:

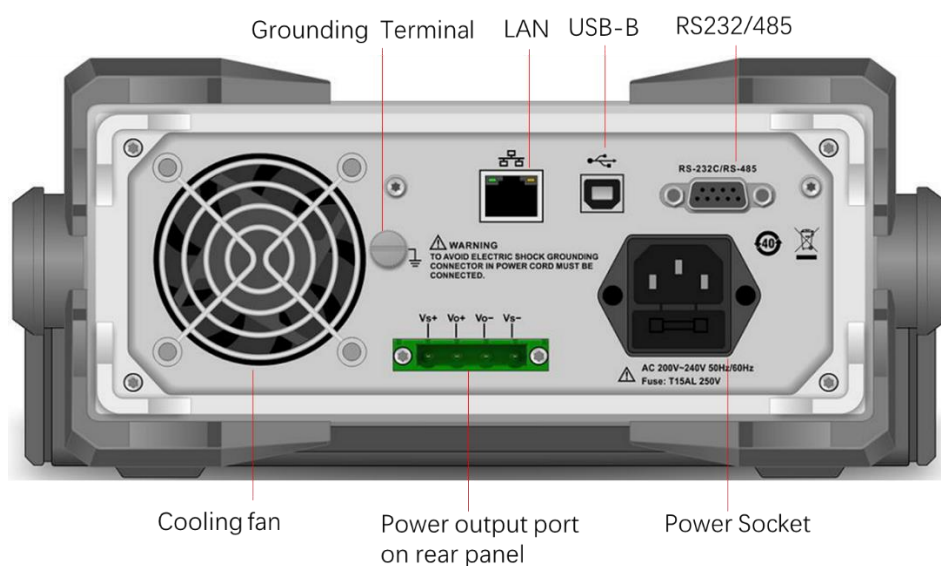
UDP6722



UDP6723/UDP6724/UDP6723B/UDP6724B



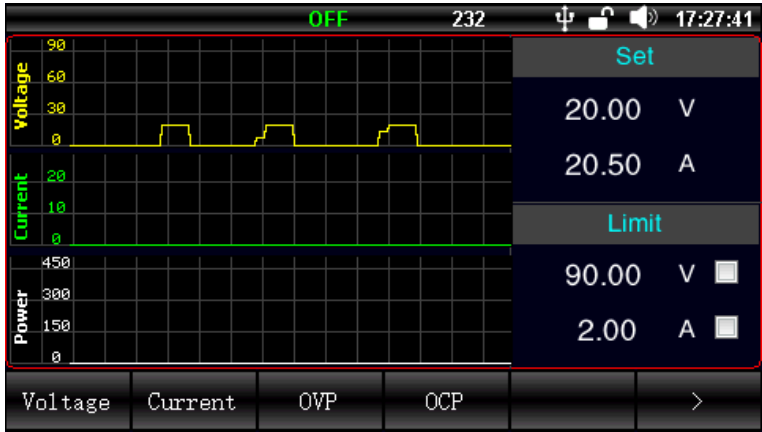
UDP6723G/UDP6724G



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

3. Design Highlights

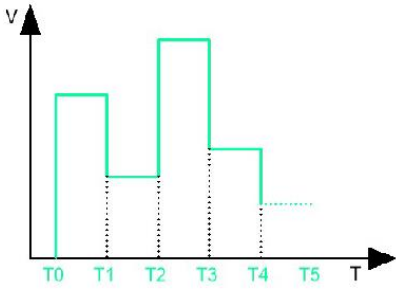
Waveform Display



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

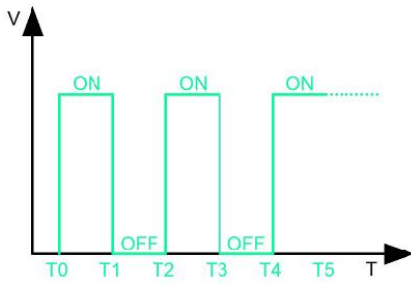
SETUP	LIST	DElayer	No.	Volt/V	Curr/A	Time/s
FileNum	File:1		0	3.00	1.00	1.0
Start	000		1	1.50	1.00	1.0
Group	199		2	4.00	1.00	1.0
Repeat	0001		3	2.00	1.00	1.0
Finish	Stop		4	1.00	1.00	1.0
Enable	Off		5	1.00	1.00	1.0
			6	1.00	1.00	1.0
			7	1.00	1.00	1.0
			8	1.00	1.00	1.0
			9	1.00	1.00	1.0



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	DElayer	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

	UDP6722
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: <50mArms	
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 Temp.coefficient (%Output/°C+Offset)	Voltage: 0.01%+10mV	
	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 $\pm$ 10%	220V $\pm$ 10%
Frequency	47~63Hz	

Size(W×H×D)	215*88*475mm	
Weight	5.9kg	
Efficiency	84%	88%
Fuse	15A	
PF	0.98	
Max Input Current	10A	
Maximum Apparent Power	1100VA	2000VA
Withstand Voltage	500V	

	UDP6723B	UDP6724B
Rated output voltage	0~150V	
Rated output current	0~20A	
Output power	850W	1500W
Load regulation ±(%of Output+Offset)	Voltage: <0.01%+40mV	
	Current: <0.1%+10mA	
Power regulation ±(%of Output+Offset)	Voltage: <0.01%+30mV	
	Current: <0.1%+10mA	
Setting Resolution	Voltage: 100mV	
	Current: 10mA	
Setting Accuracy(25°C±5°C) ±(%of Output+Offset)	Voltage: <0.03%+100mV	
	Current: <0.1%+20mA	
Readback resolution	Voltage: 100mV	
	Current: 10mA	
Readback accuracy(25°C±5°C) ±(%of Output+Offset)	Voltage: <0.03%+200mV	
	Current: <0.1%+20mA	
Ripple and noise (20Hz~20MHz)	Voltage: <150mVpp	
	Current: <30mArms	
Temperature coefficient (%Output/°C+Offset)	Voltage: 0.02%/°C+100mV	
	Current: 0.03%/°C+20mA	
Rise time (light load)	<0.3S	
Rise time (full load)	<1S	
Fall time (light load)	<5S	
Fall time (full load)	<0.2S	
Transient Response	<500uS	
Readback Temp.coefficient (%Output/°C+Offset)	Voltage: 0.02%+100mV	
	Current: 0.03%+20mA	
Setting stability-30min	Voltage: 0.03%+75mV	
	Current: 0.1%+40mA	
Setting stability-8h	Voltage: 0.03%+75mV	
	Current: 0.1%+20mA	
Readback stability-30min	Voltage: 0.03%+75mV	
	Current: 0.1%+20mA	
Readback stability-8h	Voltage: 0.03%+75mV	

	Current: 0.1%+20mA	
Protection	OVP、 OCP、 OTP	
Storage	100	
List Function	40*200	
Screen	4.3"TFT LCD	
Interface	RS232/RS485/USBHost/USBDevice/LAN	
U disk	Support	
Protocol	SCPI/MODBUS	
Power Voltage	220 ±10%	
Frequency	47~63Hz	
Size(W×H×D)	215*88*475mm	
Weight	6.1kg	
Efficiency	84%	88%
Fuse	15A	
PF	0.98	
Max Input Current	10A	
Maximum Apparent Power	1100VA	2000VA
Withstand Voltage	500V	

	UDP6723G	UDP6724G
Rated output voltage	0~600V	
Rated output current	0~5A	
Output power	850W	1500W
Load regulation	Voltage: <0.01%+100mV	
±(%of Output+Offset)	Current: <0.1%+10mA	
Power regulation	Voltage: <0.01%+50mV	
±(%of Output+Offset)	Current: <0.1%+10mA	
Setting Resolution	Voltage: 100mV	
	Current: 10mA	
Setting Accuracy(25°C±5°C)	Voltage: <0.03%+200mV	
±(%of Output+Offset)	Current: <0.1%+20mA	
Readback resolution	Voltage: 100mV	
	Current: 10mA	
Readback accuracy(25°C±5°C)	Voltage: <0.03%+200mV	
±(%of Output+Offset)	Current: <0.1%+20mA	
Ripple and noise (20Hz~20MHz)	Voltage: <300mVpp	
	Current: <30mArms	
	Voltage: 0.02%/°C+100mV	

Temperature coefficient (%Output/°C+Offset)	Current: 0.03%/°C+10mA	
Rise time (light load)	<0.3S	
Rise time (full load)	<1S	
Fall time (light load)	<5S	
Fall time (full load)	<0.2S	
Transient Response	<500uS	
Readback Temp.coefficient (%Output/°C+Offset)	Voltage: 0.02%/°C+100mV	
	Current: 0.03%/°C+10mA	
Setting stability-30min	Voltage: 0.03%+10mV	
	Current: 0.1%+20mA	
Setting stability-8h	Voltage: 0.03%+10mV	
	Current: 0.1%+20mA	
Readback stability-30min	Voltage: 0.03%+10mV	
	Current: 0.1%+20mA	
Readback stability-8h	Voltage: 0.03%+10mV	
	Current: 0.1%+20mA	
Protection	OVP、OCP、OTP	
Storage	100	
List Function	40*200	
Screen	4.3"TFT LCD	
Interface	RS232/RS485/USBHost/USBDevice/LAN	
U disk	Support	
Protocol	SCPI/MODBUS	
Power Voltage	220 ±10%	220 ±10%
Frequency	47~63Hz	
Size(W×H×D)	215*88*475mm	
Weight	7kg	
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	UDP6722: T5AL UDP6723/24/23B/24B/23G/24G: T15AL
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&23B&24B&23C&24C
UT-L0320-UU	Double U-type terminal 30A/2m power supply/electronic load test wire		UDP6722&23&24&23B&24B&23C&24C
UT-L0312-UU	Double U-type terminal 30A/1.2m power supply/electronic load test wire		UDP6722&23&24&23B&24B&23C&24C
UT-L0110-BB	Double Fold insert 10A/1m power supply/electronic load test wire		UDP6722&23&24&23B&24B&23C&24C
UT-L0110-BU	Fold insert-U type terminal 10A/1m power supply/electronic load test wire		UDP6722&23&24&23B&24B&23C&24C

7. Limited Warranty and Liability

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<https://instruments.uni-trend.com/ContactForm/>

Headquarter

UNI-TREND TECHNOLOGY (CHINA)
CO., Ltd.
Address: No.6, Industrial North 1st
Road, Songshan Lake Park, Dongguan
City, Guangdong Province, China
Tel: (86-769) 8572 3888

Europe

UNI-TREND TECHNOLOGY EU GmbH
Address: Affinger Str. 12
86167 Augsburg Germany
Tel: +49 (0)821 8879980

North America

UNI-TREND TECHNOLOGY US
INC.
Address: 3171 Mercer Ave STE
104, Bellingham, WA 98225
Tel: +1-888-668-8648