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Datasheet

UDP6720 Series Programmable DC Power Supply

V1.4

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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		
UDP6723C	0~32V, 0~110A, 0W-850W		
UDP6724C	0~32V, 0~110A, 0W-1500W		
UDP6723H	0~300V, 0~10A, 0W-850W		
UDP6724H	0~300V, 0~10A, 0W-1500W		

Front Panel:

UDP6722：

UDP6723/UDP6724/UDP6723B/UDP6724B/UDP6723C/UPD6724C

UDP6723G/UDP6724G/UDP6723H/UDP6724H

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

Rear Panel:

UDP6722

UDP6723/UDP6724/UDP6723B/UDP6724B

UDP6723G/UDP6724G/UDP6723H/UDP6724H

UDP6723C/UDP6724C:

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

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

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

Model	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℃±5℃)	Voltage: <0.01%+20mV
	Current:<0.1%+10mA
Readback resolution	Voltage: 10mV
	Current: 10mA
Readback accuracy (25℃±5℃)	Voltage: <0.01%+20mV
	Current:<0.1%+20mA
Ripple and noise (20Hz~20MHz)	Voltage: <50mVpp
	Current: <15mArms
Setting Temperature coefficient	0.02%/℃+10mV
	0.03%/℃+10mA

(%of Output/°C+Offset)	
Readback Temperature coefficient (%of Output/°C+Offset)	0.02%/℃+10mV
	0.03%/℃+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 ±(%of Output+Offset)	Voltage: <0.01%+10mV	
	Current: <0.1%+10mA	
Power regulation ±(%of Output+Offset)	Voltage: <0.01%+10mV	
	Current: <0.1%+10mA	
Setting Resolution	Voltage: 10mV	
	Current: 10mA	
Setting Accuracy (25℃±5℃)±(%of Output+Offset)	Voltage: <0.03%+20mV	
	Current: <0.1%+40mA	
Readback resolution	Voltage: 10mV	
	Current: 10mA	
Readback accuracy (25℃±5℃) ±(%of Output+Offset)	Voltage: <0.03%+20mV	
	Current: <0.1%+40mA	
Ripple and noise (20Hz~20MHz)	Voltage: <100mVpp	
	Current: <50mArms	
Setting Temp.coefficient (%of Output/°C+Offset)	Voltage: 0.02%/℃+10mV	
	Current: 0.03%/℃+20mA	
Readback Temp.coefficient (%of Output/°C+Offset)	Voltage: 0.01%+10mV	
	Current: 0.03%+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	
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	AC 220V ±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	
	Voltage: <0.01%+30mV	

Power regulation ±(%of Output+Offset)	Current: <0.1%+10mA
Setting Resolution	Voltage: 100mV
	Current: 10mA
Setting Accuracy(25℃±5℃) ±(%of Output+Offset)	Voltage: <0.03%+100mV
	Current: <0.1%+20mA
Readback resolution	Voltage: 100mV
	Current: 10mA
Readback accuracy(25℃±5℃) ±(%of Output+Offset)	Voltage: <0.03%+200mV
	Current: <0.1%+20mA
Ripple and noise (20Hz~20MHz)	Voltage: <150mVpp
	Current: <30mArms
Setting Temp.coefficient (%of Output/°C+Offset)	Voltage: 0.02%/℃+100mV
	Current: 0.03%/℃+20mA
Readback Temp.coefficient (%of Output/°C+Offset)	Voltage: 0.02%+100mV
	Current: 0.03%+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
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	AC 220V ±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	

	UDP6723C	UDP6724C
Rated output voltage	0~32V	
Rated output current	0~110A	
Output power	850W	1500W
Load regulation ±(%of Output+Offset)	Voltage: <0.01%+5mV	
	Current: <0.1%+10mA	
Power regulation ±(%of Output+Offset)	Voltage: <0.01%+5mV	
	Current: <0.1%+10mA	
Setting Resolution	Voltage: 10mV	
	Current: 10mA	
Setting Accuracy(25℃±5℃) ±(%of Output+Offset)	Voltage: <0.03%+10mV	
	Current: <0.1%+60mA	
Readback resolution	Voltage: 10mV	
	Current: 10mA	
Readback accuracy(25℃±5℃) ±(%of Output+Offset)	Voltage: <0.03%+20mV	
	Current: <0.1%+60mA	
Ripple and noise (20Hz~20MHz)	Voltage: <100mVpp	
	Current: <150mArms	
Setting Temp.coefficient (%of Output/°C+Offset)	Voltage: 0.02%/℃+10mV	
	Current: 0.03%/℃+10mA	
Readback Temp.coefficient (%Output/°C+Offset)	Voltage: 0.02%/℃+10mV	
	Current: 0.03%/℃+10mA	

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	
Setting stability-30min	Voltage: 0.03%+10mV	
	Current: 0.1%+60mA	
Setting stability-8h	Voltage: 0.03%+10mV	
	Current: 0.1%+60mA	
Readback stability-30min	Voltage: 0.03%+10mV	
	Current: 0.1%+60mA	
Readback stability-8h	Voltage: 0.03%+10mV	
	Current: 0.1%+60mA	
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	AC 220V±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	

	UDP6723G	UDP6724G
Rated output voltage	0~600V	
Rated output current	0~5A	
Output power	850W	1500W
Load regulation ±(%of Output+Offset)	Voltage: <0.01%+100mV	
	Current: <0.1%+10mA	
Power regulation ±(%of Output+Offset)	Voltage: <0.01%+50mV	
	Current: <0.1%+10mA	

Setting Resolution	Voltage: 100mV
	Current: 10mA
Setting Accuracy(25℃±5℃) ±(%of Output+Offset)	Voltage: <0.03%+200mV
	Current: <0.1%+20mA
Readback resolution	Voltage: 100mV
	Current: 10mA
Readback accuracy(25℃ ±5℃) ±(%of Output+Offset)	Voltage: <0.03%+200mV
	Current: <0.1%+20mA
Ripple and noise (20Hz~20MHz)	Voltage: <300mVpp
	Current: <30mArms
Setting Temp.coefficient (%of Output/°C+Offset)	Voltage: 0.02%/℃+100mV
	Current: 0.03%/℃+10mA
Readback Temp.coefficient (%of Output/°C+Offset)	Voltage: 0.02%/℃+100mV
	Current: 0.03%/℃+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
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	AC 220V±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	

	UDP6723H	UDP6724H
Rated output voltage	0~300V	
Rated output current	0~10A	
Output power	850W	1500W
Load regulation ±(%of Output+Offset)	Voltage: <0.01%+100mV	
	Current: <0.1%+10mA	
Power regulation ±(%of Output+Offset)	Voltage: <0.01%+50mV	
	Current: <0.1%+10mA	
Setting Resolution	Voltage: 100mV	
	Current: 10mA	
Setting Accuracy(25℃±5℃) ±(%of Output+Offset)	Voltage: <0.03%+200mV	
	Current: <0.1%+20mA	
Readback resolution	Voltage: 100mV	
	Current: 10mA	
Readback accuracy(25℃ ±5℃) ±(%of Output+Offset)	Voltage: <0.03%+200mV	
	Current: <0.1%+20mA	
Ripple and noise (20Hz~20MHz)	Voltage: <250mVpp	
	Current: <40mArms	

Setting Temp.coefficient (%of Output/°C+Offset)	Voltage: 0.02%/℃+100mV	
	Current: 0.03%/℃+20mA	
Readback Temp.coefficient (%of Output/°C+Offset)	Voltage: 0.02%/℃+100mV	
	Current: 0.03%/℃+10mA	
Rise time (light load)	<0.3S	
Rise time (full load)	<1S	
Fall time (light load)	<5S	
Fall time (full load)	<0.15S	
Transient Response	<500uS	
Setting stability-30min	Voltage: 0.03%+200mV	
	Current: 0.1%+20mA	
Setting stability-8h	Voltage: 0.03%+200mV	
	Current: 0.1%+20mA	
Readback stability-30min	Voltage: 0.03%+200mV	
	Current: 0.1%+20mA	
Readback stability-8h	Voltage: 0.03%+200mV	
	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	AC 220V±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/23C/24C/23H/24H: 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-OO	Double O type terminal 60A/1.5m power supply/electronic load test wire		UDP6723&24&23B&24B&23C&24C&23G&24G&23H&24H
UT-L0320-UU	Double U-type terminal 30A/2m power supply/electronic load test wire		UDP6722&23&24&23B&24B&23C&24C&23G&24G&23H&24H

UT-L0312-UU	Double U-type terminal 30A/1.2m power supply/electronic load test wire		UDP6722&23&24&23B&24B&23C&24C&23G&24G&23H&24H
UT-L0110-BB	Double Fold insert 10A/1m power supply/electronic load test wire		UDP6722&23&24&23B&24B&23C&24C&23G&24G&23H&24H
UT-L0110-BU	Fold insert-U type terminal 10A/1m power supply/electronic load test wire		UDP6722&23&24&23B&24B&23C&24C&23G&24G&23H&24H

7. Limited Warranty and Liability

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