Data Sheet

UDP3000S Series
## Programmable Linear DC Power Supply

Main Features

●Maximum power up to 373W

●Four channel independent output：CH1/CH2: 0~30V/5A,CH3：0~6V/3A, CH4：5V/2A

●Multiple protection：OCP/OVP/OTP

●Excellent load regulation and line regulation

●Ultra low output ripple and noise

●Support one key serial and parallel output function

●The 4.3-inch TFT display can display three channels and multiple parameters at the same time

●List / delayer function to control voltage and current output as required

●External trigger function to realize industrial automation control

●Provide USB host, USB device, LAN, RS232, digital IO and other interfaces

●With waveform display function, real-time and dynamic display of output voltage / current / power waveform

●Intelligent speed control of fan can effectively reduce fan noise during operation

●Support 10 groups of file storage and transfer out, and support USB flash disk reading and writing

●High precision display of five-digit voltage / four-digit current, with resolutions of 10mV / 1mA and 1mV / 1mA

●Keyboard lock function to prevent misoperation

●Support SCPI remote command control

DC Power Supply Panel
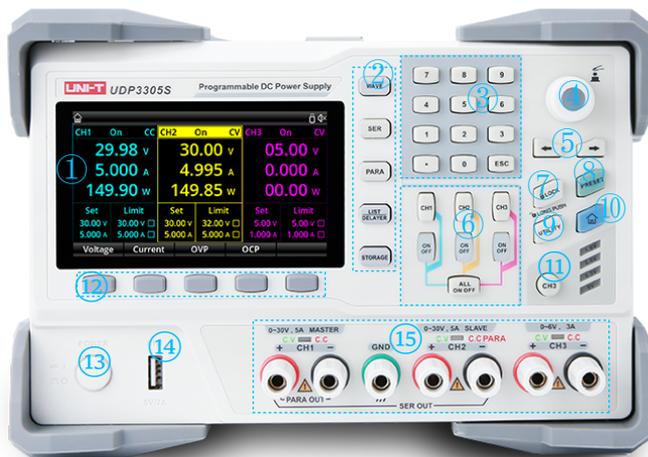
①LCD display ②Function key ③Digital keyboard ④Rotary encoder

⑤Shift key ⑥Channel selection and output control ⑦Keyboard lock

⑧Preset key ⑨System settings ⑩Home key ⑪CH3 quick selection

⑫Operation menu ⑬Power switch ⑭CH4 output

⑮Output channel and indicator ⑯USB HOST ⑰LAN ⑱USB device

⑲Digital IO ⑳RS232 ㉑Fan ㉒Input source selection ㉓Protected GND

㉔AC socket

Product Introduction

UDP3000S series is a high-performance programmable linear DC power supply. It has a clear LCD user interface, excellent performance indicators, a variety of analysis functions and communication interfaces. It can meet the diversified test needs of users. It aims to provide cost-effective DC programmable power supply equipment for teaching, scientific research, industry and other fields.

Human-computer interaction

UDP3000S series power supply has 4.3inch TFT LCD, which provides a human-computer interaction interface with rich functions and simple operation. The real-time information, setting value and limit value of three channels are displayed at the same time. The test interface is clear at a glance, saving the time of browsing and searching.

Excellent performance

UDP3000S series has excellent performance indicators. Provide cleaner and reliable DC power supply. It reduces unnecessary interference in use.


234µVrms
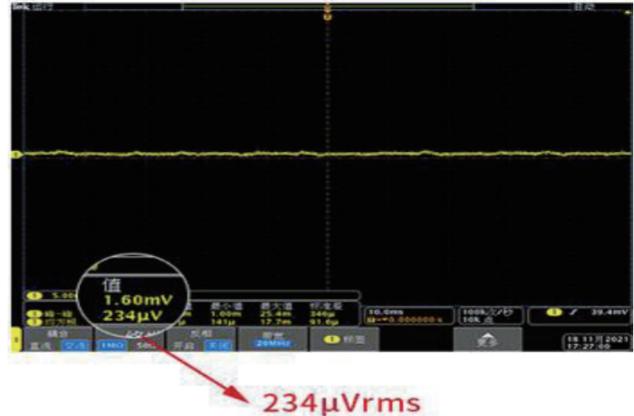
One key series parallel

All channels of this series of power supply are isolated from each other. One key series parallel connection of CH1 and CH2 can be realized through function keys. You do not need additional wiring. Just follow the interface diagram for wiring, which is fast and easy to operate. It provides you with a wider working range of power supply.


Remote control

This series of power supply provides a variety of remote connection interfaces of USB / LAN / RS232. It supports SCPI general protocol and is equipped with host computer software, which can set, view and carry out statistical work on PC.
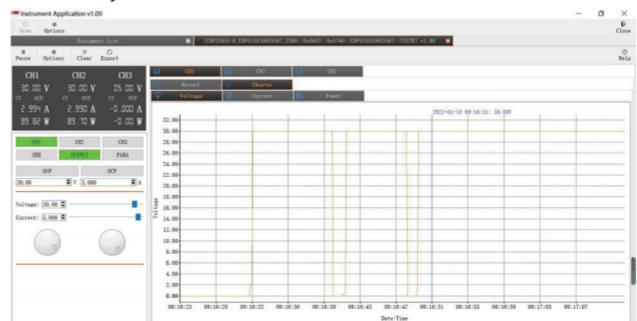
Waveform display

UDP3000S series power supply has waveform display function, which can intuitively display the change trend of voltage, current and power. Provide users with better operation experience.
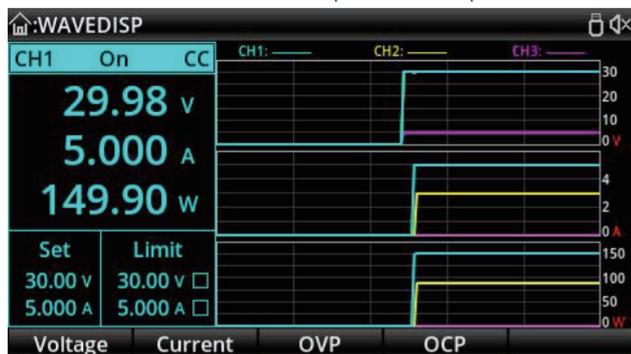
List/delayer function

UDP3000S series provides list and delayer functions. The power output curve can be edited freely to meet the test requirements. The delayer can be applied to the on-off test to investigate the reliability of the tested equipment.
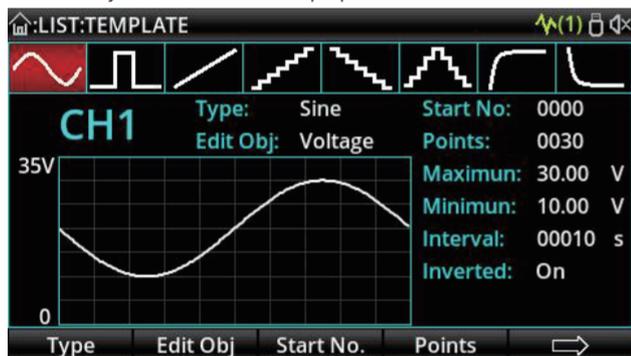

Protection function

UDP3000S series has OVP / OCP / OTP function to provide protection for power supply. It is equipped with current and voltage limit functions to provide guarantee for the tested equipment. It is equipped with monitor function, which can freely set protection conditions and give alarms.

External trigger

This series of power supply provides digital IO port, which can be edited as external trigger mode to realize remote control power supply. Set as output mode, it can provide trigger information and status flag for external instruments.
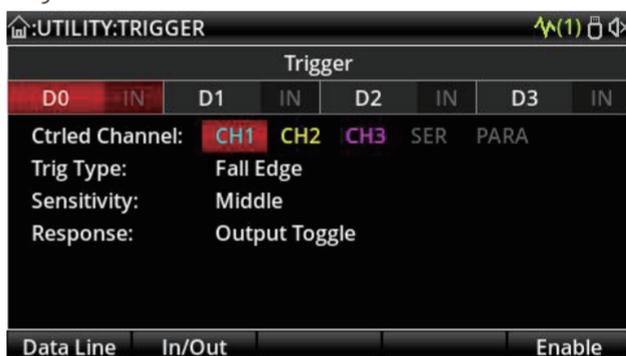
Preset function

UDP3000S series power supply can save 10 groups of list and delayer files respectively. You can save 5 sets of common configurations through presets. It provides convenience for quick access to common settings.

Technical Specification

Model		UDP3305S-E	UDP3305S
Channel	Channel	4	4
Output Rating	Voltage	CH1&CH2: 0~32V	CH1&CH2: 0~32V
		CH3: 0~6V	CH3: 0~6V
		CH4: 5V (USB Output)	CH4: 5V (USB Output)
	Current	CH1&CH2: 0~5A	CH1&CH2: 0~5A
		CH3: 0~3A	CH3: 0~3A
		CH4: 2A (USB Output)	CH4: 2A (USB Output)
	Power	348W	348W
CV mode	Regulation	Line Regulation: ≤0.01%+2mV	Line Regulation: ≤0.01%+2mV
		Load Regulation: ≤0.01%+2mV	Load Regulation: ≤0.01%+2mV
	Regulation	<350μVrms/2mVpp(5Hz~1MHz)	<350μVrms/2mVpp(5Hz~1MHz)
	Reaction time	≤50μs(50% load variation, minimum load 0.5A)	≤50μs(50% load variation, minimum load 0.5A)
	Command processing time	<100ms	<100ms
CC mode	Regulation	Line Regulation: ≤0.01%+250μA	Line Regulation: ≤0.01%+250μA
		Line Regulation: ≤0.01%+250μA	Load Regulation: ≤0.01%+250μA
	Ripple current	≤2mArms	≤2mArms
Tracking mode	parallel connection	Line Regulation: ≤0.01%+2mV	Line Regulation: ≤0.01%+2mV
		Load Regulation: ≤0.01%+2mV	Load Regulation: ≤0.01%+2mV
	series connection	Line Regulation: ≤0.01%+3mV	Line Regulation: ≤0.01%+3mV
		Load Regulation: ≤300mV	Load Regulation: ≤300mV
	Tracking error	≤0.5%+10mV (10~30V No load)	≤0.5%+10mV (10~30V No load)
		≤0.5%+30mV (0~9.99V No load)	≤0.5%+30mV (0~9.99V No load)
		Access load ≤300mV	Access load ≤300mV
measure	Display	Voltage full scale, 4-digit display; 4.3inch LCD	Voltage full scale, 5-digit display; 4.3inch LCD
		Current full scale, 4-digit display; 4.3inch LCD	Current full scale, 4-digit display; 4.3inch LCD
	Programming resolution	Voltage: 10mV	Voltage: 1mV
		Current: 1mA	Current: 1mA
	Readback resolution	Voltage: 10mV	Voltage: 1mV
		Current: 1mA	Current: 1mA
	Programming accuracy (25±5℃)	Voltage: ± (0.3%+20mV)	Voltage: ± (0.03%+10mV)
		Current: ± (0.2%+5mA)	Current: ± (0.2%+5mA)
	Readback accuracy (25±5℃)	Voltage: ± (0.1%+20mV)	Voltage: ± (0.03%+10mV)
		Current: ± (0.15%+5mA)	Current: ± (0.15%+5mA)
Voltage programmed speed (1% of the total variation range)	CH1	Rise: full load < 50ms; No load < 30ms	Rise: full load < 50ms; No load < 30ms
		Fall: full load < 45ms; No load < 400ms	Fall: full load < 45ms; No load < 400ms
	CH2	Rise: full load < 50ms; No load < 30ms	Rise: full load < 50ms; No load < 30ms
		Fall: full load < 45ms; No load < 400ms	Fall: full load < 45ms; No load < 400ms
	CH3	Rise: full load < 15ms; No load <13ms	Rise: full load < 15ms; No load <13ms
		Fall: full load < 22ms; No load < 100ms	Fall: full load < 22ms; No load < 100ms
Temperature coefficient per ℃ (output percentage + offset)	CH1	Voltage: 0.01%+5mV	Voltage: 0.01%+5mV
		Current: 0.01%+2mA	Current: 0.01%+2mA
	CH2	Voltage: 0.01%+5mV	Voltage: 0.01%+5mV
		Current: 0.01%+2mA	Current: 0.01%+2mA
	CH3	Voltage: 0.01%+2mV	Voltage: 0.01%+2mV
		Current: 0.01%+2mA	Current: 0.01%+2mA

Channel 4 (USB output)	Output voltage	5V ±0.25V	5V ±0.25V
	Output current	2A	2A
Input	Voltage	AC 100V/120V/220V/230V±10%	AC 100V/120V/220V/230V±10%
	Frequency	50/60Hz	50/60Hz
	Power	MAX 600W	MAX 600W
	Fuse	AC220V : T4AL250V	AC220V : T4AL250V
		AC110V : T8AL250V	AC110V : T8AL250V
Environment	Operating temperature	0℃~40℃	0℃~40℃
	Operating humidity	20%~80% (non-condensing)	20%~80% (non-condensing)
	Storage temperature	-10℃~60℃	-10℃~60℃
	Altitude	≤2000m	≤2000m
	Pollution degree	2	2
Size and weight	Size	355mm*240mm*168mm	355mm*240mm*168mm
	Weight	10.2kG	10.2kG

CE UKCA cTUVus (TUV Rheinland of North America, INC.)

*The UDP3000S series have been cerified by CE, UKCA, cTUVus

Aaccessories	
Standard accessories	Power cord that meets the standards of the country of destination
	USB data cable
Optional accessories	Alligator clip test line

Warranty

Three-years warranty, excluding probes and accessories.

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