DC Power Supply

Programmable Linear DC Power Supply
TPD-Series

Product description:

TPD series are high precision programmable DC power supply with single output, output power rated from 60W to 375W with various model numbers. A remarkable feature of TPD series is high resolution 1mV/0.1mA. Delay Time and Auto Run facilitate automatic test in different applications. USB/RS-232 interface, SCPI command sets make remote control easier. The smart cooling fan ensures low noise. Overload, over voltage, over current, over temperature and reverse polarity protections protect TPD series and their load from unexpected conditions. High stability and high accuracy further make TPD series an ideal option for various applications requiring high resolution and accurate control.



TPD-Series

Features

- Single-channel output with single range (TPD-series) and dual ranges (TPD-D series).
- Equipped with a 24-bit ADC and 16-bit DAC, offering high accuracy and high resolution.
- Comprehensive protection are overload, reverse polarity, overvoltage, overcurrent and overtemperature.
- Intuitive and efficient operation/setting interface, featuring a high-speed adjustment knob and numeric keypad.
- Built-in buzzer for notifications or warnings.
- 122x32 backlit LCD display for full output details.
- One-touch lock function (ON/OFF) to prevent accidental operation.
- Delay time setup (99999s) and AUTO running program for easy AUTO test.
- Dedicated output control switch for greater operational flexibility.
- Equipped with a USB (standard) and RS232 interface (option).
- Programming command set compliant with SCPI standards, Labview.
- Storage/recall capacity for 100 sets of voltage and current data; support automated testing via "Auto" execution programs
- Constant voltage (CV) and constant current (CC) output modes, with automatic switching based on load conditions.



Ordering Informations

TPD-3003D : Single-output Programmable DC Power Supply with dual range (36V/3A, 15V/6A)
TPD-3005D : Single-output Programmable DC Power Supply with dual range (36V/5A, 15V/10A)
TPD-3003 : Single-output Programmable DC Power Supply with single range (30V/3A)
TPD-3005 : Single-output Programmable DC Power Supply with single range (30V/5A)
TPD-6001 : Single-output Programmable DC Power Supply with single range (30V/3A)
TPD-6003 : Single-output Programmable DC Power Supply with single range (30V/3A)
TPD-6005 : Single-output Programmable DC Power Supply with single range (60V/5A)
TPD-2010 : Single-output Programmable DC Power Supply with single range (20V/10A)
TPD-3010 : Single-output Programmable DC Power Supply with single range (30V/10A)
TPD-7503 : Single-output Programmable DC Power Supply with single range (75V/3A)
TPD-7505 : Single-output Programmable DC Power Supply with single range (75V/5A)

Standard Accessories :

- User Manual
- CD software
- Power cord
- USB or RS-232 cable

Specifications

Model	TPD-3003D		TPT-3005D		TPD-3003	TPD-3005	TPD-6001	TPD-6003
Output Range	36V/3A	15V/6A	36V/5A	15V/10A	30V/3A	30V/5A	60V/1A	60V/3A
Rate DC Outout (0°C ~ 40°C)								
Voltage	0 ~ 36V	0 ~ 15V	0 ~ 36V	0 ~ 15V	0 ~ 30V		0 ~ 60V	
Current	0 ~ 3A	0 ~ 6A	0 ~ 5A	0 ~ 10A	0 ~ 3A	0 ~ 5A	0 ~ 1A	0 ~ 3A
Overvoltage Protection	0.1 ~ 38V				0.1 ~ 34V		0.1 ~ 64V	
Overcurrent Protection	0.1 ~ 6.5A		0.1 ~ 11A		0 ~ 3.5A	0 ~ 5.5A	0 ~ 1.5A	0 ~ 3.5A
Voltage Output								
Power Effect	≤ 0.01%+3mV							
Loading effect	≤ 0.01%+3mV (I≤3A) / ≤0.02%+5mV (I>3A)							
Recovery Time	≤ 100μs (50% load change, minimum load 0.5A)							
Ripple and Noise	≤ 1mVrms (I≤3A) (5Hz ~ 1MHz) / ≤2mVrms (I>3A) (5Hz ~ 1MHz)							
Temperture Coefficient	≤300ppm/°C							
Setting Accuracy	±(0.03% of reading + 10mV) (25±5°C)							
Set resolution	1mV							
Current Output								
Power Effect	≤ 0.2%+3mA							
Loading Effect	≤ 0.2%+3mA (I≤3A) / ≤0.2%+5mA (I>3A)							
Ripple and Noise	≤ 3mArms (I≤3A) / ≤6mArms (I>3A)							
Setting Accuracy	±(0.2% of reading + 10mA) (25±5°C)							
Set Resolution	0.1mA		1mA		0.1mA			
Display and Functions								
Voltage & Current	5 digits display							
Voltage Resolution	1mV							
Current Resolution	0.1mA		1mA		0.1mA			
Reading Accuracy	±(0.02% of reading + 5mV) (25±5°C); ±(0.02% of reading + 5mA) (25±5°C)							
Protection	Overload protection, reverse plarity protection, overvoltage protection, over curren protection, overtemp protection							
Lock Keyboard	√							
Programming Interface	Standand configuration includes RS-232 or USB interface, support SCPI command							
Store Recall	100 groups							
Operating Environment	Indoor use Altiude: 2000M Ambient tempetruare: & Humidity: 0°C ~ 40°C <80%RH Installation level : II Pullution level: 2							
Storage Environment	-10°C ~ 70°C, <70%RH							
Power Input	AC 110V/220V±10%, 50/60Hz							
Dimension (WxDxH)	126 x 296 x 143 mm.							
Weight	5.5kg		6.2kg		5.5kg			

Model	TPD-6005	TPD-2010	TPD-3010	TPD-7503	TPD-7505
Output Range	60V/5A	20V/10A	30V/10A	75V/3A	75V/5A
Rate DC Outout (0°C ~ 40°C)					
Voltage	0 ~ 60V	0 ~ 20V	0 ~ 30V	0 ~ 75V	
Current	0 ~ 5A	0 ~ 10A	0 ~ 10A	0 ~3A	0 ~ 5A
Overvoltage Protection	0.1 ~ 64V	0.1 ~ 24V	0.1 ~ 34V	0.1 ~ 80V	
Overcurrent Protection	0 ~ 5.5A	0.1 ~ 11A		0 ~ 3.5A	0 ~ 5.5A
Voltage Output					
Power Effect	≤ 0.01%+3mV				
Loading effect	≤ 0.01%+3mV (I≤3A) / ≤0.02%+5mV (I>3A)				
Recovery Time	≤ 100μs (50% load change, minimum load 0.5A)				
Ripple and Noise	≤ 1mVrms (I≤3A) (5Hz ~ 1MHz) / ≤2mVrms (I>3A) (5Hz ~ 1MHz)				
Temperture Coefficient	≤300ppm/°C				
Setting Accuracy	±(0.03% of reading + 10mV) (25±5°C)				
Set resolution	1mV			2mV	
Current Output					
Power Effect	≤ 0.2%+3mA				
Loading Effect	≤ 0.2%+3mA (I≤3A) / ≤0.2%+5mA (I>3A)				
Ripple and Noise	≤ 3mArms (I≤3A) / ≤6mArms (I>3A)				
Setting Accuracy	±(0.2% of reading + 10mA) (25±5°C)				
Set Resolution	0.1mA	1mA		0.1mA	
Display and Functions					
Voltage & Current	5 digits display				
Voltage Resolution	1mV				
Current Resolution	0.1mA	1mA		0.1mA	
Reading Accuracy	±(0.02% of reading + 5mV) (25±5°C); ±(0.02% of reading + 5mA) (25±5°C)				
Protection	Overload protection, reverse plarity protection, overvoltage protection, over curren protection, overtemp protection				
Lock Keyboard	√				
Programming Interface	Standnd configuration includes RS-232 or USB interface, support SCPI command				
Store Recall	100 groups				
Operating Environment	Indoor use Altiude: 2000M Ambient tempetruare: & Humidity: 0°C ~ 40°C <80%RH Installation level : II Pullution level: 2				
Storage Environment	-10°C ~ 70°C, <70%RH				
Power Input	AC 110V/220V±10%, 50/60Hz				
Dimension (WxDxH)	126 x 296 x 143 mm.				126 x 396 x 143 mm.
Weight	7kg	6.4kg	7.5kg	6.3kg	8.8kg