

TPM3000 series (1mV/0.1mA, with USB or RS-232 interface)

Introduction

TPM3000 series are 2-in-1 high precision programmable DC power supply with 2 output ranges from 1 output channel. The output power of TPM3000 series is 90W to 180W. A remarkable feature of the TPM3000 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. OLP, OVP, OCP, OTP and reverse polarity protections protect the TPM3000 series and their load from unexpected conditions. High stability and high accuracy further make TPM series an ideal option for various applications requiring high resolution and accurate control.

Features

- ✓ 1CH output with 2 selectable output ranges
- ✓ High resolution 1mV/0.1mA
- ✓ 24-bit ADC and 16-bit DAC, high accuracy
- ✓ Over load, over voltage, over current, over temperature and reverse polarity protections
- ✓ Constant voltage (CV) and constant current (CC) operations; Auto CV and CC switch
- ✓ Back-light 122x32 LCD display for full output details
- ✓ High speed rotary dial and keypad input
- ✓ Built-in beeper alarm
- ✓ Panel lock and output ON/OFF function
- ✓ 100 sets save & recall for V&I setup
- ✓ Delay time setup (99999s) and AUTO running program for easy AUTO test
- ✓ USB or RS-232 interface for PC remote control
- ✓ Support SCPI commands, support Labview

Product photo



TPM-3003

Specifications

Model	TPM-3003	TPM-3005
Output	0~36V/0~3A 0~15V/0~6A	0~36V/0~5A 0~15V/0~10A
Constant voltage operation		
Line regulation	≤0.01%+3mV	
Load regulation	≤0.01%+3mV (I≤3A); ≤0.02%+5mV (I>3A)	
Ripple & Noise	≤1mVrms (I≤3A) (5Hz~1MHz); ≤2mVrms (I>3A) (5Hz~1MHz)	
Recovery time	≤100us (50% load change, minimum load 0.5A)	
Constant current operation		
Line regulation	≤0.2%+3mA	
Load regulation	≤0.2%+3mA (I≤3A); ≤0.2%+5mA (I>3A)	
Ripple & Noise	≤3mArms (I≤3A); ≤6mArms (I>3A)	
Display		
Voltmeter	5 digits LCD display	
Ammeter	5 digits LCD display	
Setting accuracy	Voltage	±(0.03% reading+10mV) (25±5°C)
	Current	±(0.2% reading+10mA) (25±5°C)
Reading accuracy	Voltage	±(0.02% reading+5mV) (25±5°C)
	Current	±(0.02% reading+5mA) (25±5°C)
Protection	Over load, over voltage, over current, over temperature and reverse polarity protections	
Panel lock	Provided	
Programming interface	USB or RS-232, support SCPI commands, support Labview	
Memory	100 sets	
Insulation	Between base and output terminal≥20MΩ/500VDC Between base and power cord≥30MΩ/500VDC	
Operating environment	0°C~40°C, ≤80%RH	
Storage environment	-10°C~70°C, ≤70%RH	
Power source	AC110V/220V±10% selectable, 50/60Hz	
Accessories	Power cord x1, Operation manual x1, Test lead x1, USB or RS-232 cable x1, Software CD x1	

Selection Guide

Model	TPM-3003		TPM-3005		TPM-3003E	TPM-3005E	TPM-6003E
Output voltage	0~36V	0~15V	0~36V	0~15V	0~30V	0~30V	0~60V
Output current	0~3A	0~6A	0~5A	0~10A	0~3A	0~5A	0~3A
OVP range	0.1~38V		0.1~38V		0.1~34V	0.1~34V	0.1~64V
OCP range	0.1~6.5A		0.1~11A		0.1~3.5A	0.1~5.5A	0.1~3.5A
Resolution	1mV/0.1mA		1mV/1mA		1mV/0.1mA		
Dimension	126x143x296mm						
Weight	5.5kg		6.5kg		4.5kg	5.5kg	5.5kg