

DC Power Supply

Programmable Switching DC Power Supply TPW-Series



TPW-Series

Product description:

TPW-Series are high accuracy programmable DC power supply with single output. Using MPU control, RS-232/RS-485/USB interface for PC control, TPW-Series facilitates auto test and auto control. The commands of TPW-Series are compliant with SCPI commands. Users can easily develop programs to facilitate different applications in auto test and auto control. Digital input fulfilled by rotary dial and keypad input, fast and accurate. Voltage and current regulations by software, avoids human error and makes the PPW series more accurate

Features

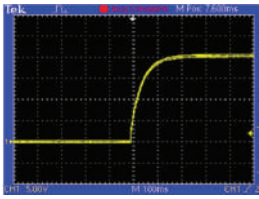
- ◆ High accuracy, high resolution
- ◆ High speed rotary dial and keypad input
- ◆ Remote sense function
- ◆ Battery curved charge mode
- ◆ Support SCPI & ModBus-RTU commands, support Labview Data record software
- ◆ List mode function, 300 sets save & recall for voltage, current and time setups
- ◆ Communication interface: RS232 at default, optional RS85 and 0-5V analog interface
- ◆ 5 Digits 4.3-inch backlit Segment LCD display
- ◆ CV/CC priority setup
- ◆ Load resistance measurement
- ◆ Multiple protections: OVP, OCP, OLP, OTP and reverse polarity protections

Specifications

Model		TPW-3010	TPW-2030	TPW-3020	TPW-6010	TPW-8008	TPW-1560	TPW-2045	
Rate Output	Power	300 W	600 W	600 W	600 W	640W	900 W	900 W	
	Voltage	0 ~ 31 V	0 ~ 20.5 V	0 ~ 31 V	0 ~ 60.5 V	0 ~ 80.5 V	0 ~ 15.5 V	0 ~ 20.5 V	
	Current	0 ~ 10.5 A	0 ~ 30.5 A	0 ~ 21 A	0 ~ 10.5 A	0 ~ 8.0 A	0 ~ 60.5 V	0 ~ 45.5 A	
Line Regulation	Voltage	≤0.01%+4mV							
	Current	≤0.1%+3mA						≤0.2%+3mV	
Load Regulation	Voltage	≤0.1%+5mV							
	Current	≤0.1%+5mA						≤0.2%+5mV	
Setting Accuracy	Voltage	±(0.03% of Reading + 10mV)							
	Current	±(0.1% of Reading + 0.1% of FS)							
Setting Resolution	Voltage	1mV							
	Current	1mA							
Reading Accuracy	Voltage	±(0.02% of Reading + 5mV)							
	Current	±(0.1% of Reading + 0.1% of FS)							
Reading Resolution	Voltage	1mV							
	Current	1mA							
Ripple&Noise (20Hz~20MHz)	Voltage	≤2mVrms, 30mVpp							
	Current	≤10mArms							
Rise Time	Empty Load	≤500ms					≤200ms	≤300ms	
	Full Load	≤1s					≤300ms	≤1s	
Fall Time	Empty Load	≤1.5s	≤1.5s	≤1.5s	≤3s	≤4s	≤2s		
	Full Load	≤3ms	≤1.5s	≤1.5s	≤1.5s	≤1.5s	≤2ms		
Recovery Time	≤15ms (50% load change)								
Temp. Coefficient	≤1000ppm/°C								
Efficiency	80% typical								
Power Factor	0.98								
Protection	Over load, over voltage, over current, over temperature and reverse polarity protections								
O.V.P Setting Range	0.1 ~ 34 V	0.1 ~ 24 V	0.1 ~ 34 V	0.1 ~ 64 V	0.1 ~ 88 V	0.1 ~ 18 V	0.1 ~ 24 V		
O.C.P Setting Range	0.1 ~ 24 A	0.1 ~ 34 A	0.1 ~ 24 A	0.1 ~ 12 A	0.1 ~ 8.8 A	0.1 ~ 62 A	0.1 ~ 50 A		
Remote Sense Function	Maximum compensation voltage 5% of FS								
Battery Charge	Lithium battery curue charge								
Digital Interface	RS232 (Standard), Support SCPI. Option : RS485 interface, support ModBus commands								
Analog Interface	Optional 0-5V analog control for output ON/OFF, voltage & current control & monitor								
Memory	300 sets								
Insulation	Between base and terminal : ≥20MΩ/500VDC								
	Between base and AC line : ≥30MΩ/500VDC								
Operation Environment	Indoor use		Aititube : ≤2000m		Ambient tempertaure : 0 ~ 40°C				
	Relative humidity : 80%RH		Installation category : II		Pollution degree : 2				
Storage Environment	-10°C ~ 70°C, ≤70%RH								
Power Input	AC 220V±10%, 50/60Hz								
Dimension (WxHxD)	215x89x352 mm.						215x89x412 mm.		
Weight	4.5kg						5.5kg		

Applications / Functions

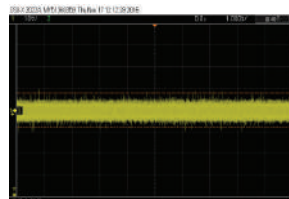
◆ No Overshoot



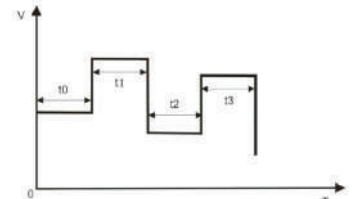
◆ Fast Transient Response Time



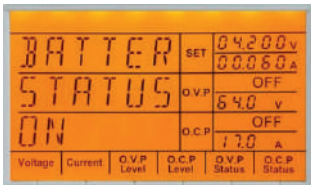
◆ Low Ripple, Pure Output



◆ Timing Output



◆ Battery curved Charge



◆ Low Resistance Measurement



◆ Remote Sense

◆ Rack Mount Compatible

◆ Voltage Self Check



Ordering Information

- TPW-3010 : 300W/30V/10A
- TPW-3020 : 600W/30V/20A
- TPW-8008 : 640W/80V/8A
- TPW-2045 : 900W/20V/45A
- TPW-3625 : 900W/36V/25A
- TPW-12007 : 900W/120V/7.5A
- TPW-2030 : 600W/20V/30A
- TPW-6010 : 600W/60V/10A
- TPW-1560 : 900W/15V/60A
- TPW-3030 : 900W/30V/30A
- TPW-4520 : 900W/45V/20A
- TPW-15006 : 900W/150V/6A

Standard Accessories :

- User Manual
- Power cord
- RS-232 cable
- Software CD

Specifications

Model		TPW-3030	TPW-3625	TPW-4520	TPW-6015	TPW-8011	TPW-12007	TPW-15006
Rate Output	Power	900 W	900 W	900 W	900 W	900W	900 W	900 W
	Voltage	0 ~ 31 V	0 ~ 36.5 V	0 ~ 45.5 V	0 ~ 60.5 V	0 ~ 80.5 V	0 ~ 121 V	0 ~ 151 V
	Current	0 ~ 31 A	0 ~ 25.5 A	0 ~ 20.5 A	0 ~ 15.5 A	0 ~ 11.5 A	0 ~ 7.6 A	0 ~ 6.1 A
Line Regulation	Voltage	≤0.01%+4mV						
	Current	≤0.2%+3mA						
Load Regulation	Voltage	≤0.1%+5mV						
	Current	≤0.2%+5mA						
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Ripple&Noise (20Hz~20MHz)	Voltage	≤2mVrms, 30mVpp						≤5mVrms, ≤50mVpp
	Current	≤10mA rms						
Rise Time	Empty Load	≤500ms				≤1s	≤15s	
	Full Load	≤1s				≤2		
Fall Time	Empty Load	≤2s	≤3s		≤3s	≤4s	≤8s	
	Full Load	≤2ms	≤15s	≤15s	≤3ms	≤4ms	≤9ms	≤12ms
Recovery Time	≤15ms (50% load change)							
Temp. Coefficient	≤100ppm/°C							
Efficiency	80% typical							
Power Factor	0.98							
Protection	Over load, over voltage, over current, over temperature and reverse polarity protections							
O.V.P Setting Range	0.1 ~ 34 V	0.1 ~ 40 V	0.1 ~ 55 V	0.1 ~ 64 V	0.1 ~ 88 V	0.1 ~ 132 V	0.1 ~ 160 V	
O.C.P Setting Range	0.1 ~ 34 A	0.1 ~ 27.5 A	0.1 ~ 22 A	0.1 ~ 17 A	0.1 ~ 12 A	0.1 ~ 8 A	0.1 ~ 6.6 A	
Remote Sense Function	Maximum compensation voltage 5% of FS							
Battery Charge	Lithium battery curve charge							
Digital Interface	RS232 (Standard), Support SCPI. Option : RS485 interface, support ModBus commands							
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Dimension (WxHxD)	215x89x412 mm.							
Weight	5.5kg							

Safety Tester
AC Power Supply
DC Power Supply
Power Analyzer
Electronic Load
Resistance Tester
LCR Meter
Temperature Tester
Environmental Tester