

PPM series (90W~375W, 1mV/0.1mA, with RS-232 interface)

Introduction

PPM series are high precision programmable DC power supply with single output, output power rated from 90W to 375W with various model numbers. PPM series are featured with low regulation 0.01%, low ripple and noise 1mVrms, automatic continuous or dynamic load change, battery charge function. MPU control, RS-232/RS-485/USB interface for PC control, the PPM series facilitates auto test and auto control. The commands of the PPM 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 PPM series more accurate.

Features

- ✓ 0.01% low regulation, high accuracy and high resolution
- ✓ Over load, over voltage, over current, over temperature and reverse polarity protections
- ✓ Constant voltage and constant current operations, auto CV and CC switch
- ✓ Automatic continuous or dynamic load change
- ✓ 1mVrms low ripple & noise
- ✓ 4.3-inch backlit Segment LCD display
- ✓ High speed rotary dial and keypad input
- ✓ Built-in beeper alarm
- ✓ Panel lock and output ON/OFF function
- ✓ List mode function, 300 sets save & recall for voltage, current and time setups, easy use in auto test
- ✓ Dual range output (only for PPM-3603D, PPM-3605D)
- ✓ Remote sense function (except PPM-3H12, PPM-5H07)
- ✓ Display load resistance value
- ✓ Battery charge mode
- ✓ Standard RS-232 interface, support SCPI commands, support Labview
- ✓ Optional RS-485 interface, support Modbus
- ✓ Optional RS-232 to USB cable
- ✓ Optional 0-5V analog control (except PPM-3H12, PPM-5H07)

Product photo

PPM-7505



PPM-1820
PPM-12003



Programmable Linear DC Power Supply



Specifications (90W ~ 180W)

Model	PPM-3603D	PPM-3605D	PPM-3003	PPM-3005	PPM-3603	PPM-3605	PPM-6003	PPM-6005
Rated output (0°C~40°C)								
Voltage	0~40V 0~18V	0~40V 0~18V	0~32V	0~32V	0~40V	0~40V	0~64V	0~64V
Current	0~3.2A 0~6.4A	0~6.4A 0~11A	0~3.2A	0~5.5A	0~3.2A	0~5.5A	0~3.2A	0~5.5A
O.V.P	0.1~42V	0.1~42V	0.1~36V	0.1~36V	0.1~42V	0.1~42V	0.1~68V	0.1~68V
O.C.P	0.1~7.0A	0.1~12A	0.1~3.6A	0.1~6.0A	0.1~3.6A	0.1~6.0A	0.1~3.6A	0.1~6.0A
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); ≤2mVrms (I>3A) (5Hz~1MHz)							
Recovery time	≤100us (50% load change, minimum load 0.5A)							
Constant Current Operation								
Line regulation	≤0.1%+3mA							
Load regulation	≤0.1%+3mA (I≤3A); ≤0.1%+5mA (I>3A)							
Ripple & Noise	≤3mArms (I≤3A), ≤6mArms (I>3A)							
Display								
Voltmeter	5 digits LCD display							
Ammeter	5 digits LCD display							
Setting resolution	1mV/0.1mA	1mV/1mA				1mV/0.1mA		
Reading resolution	1mV/0.1mA	1mV/1mA				1mV/0.1mA		
Setting accuracy	Voltage	±(0.03% of reading + 10mV) (25±5°C)						
	Current	±(0.1% of reading + 0.1% of FS) (25±5°C)						
Reading accuracy	Voltage	±(0.02% of reading + 5mV) (25±5°C)						
	Current	±(0.1% of reading + 0.1% of FS) (25±5°C)						
General								
Protection	Over load, over voltage, over current, over temperature and reverse polarity protections							
Panel lock	Provided							
Remote sense function	Maximum compensation voltage 5% of FS							
Battery charge	Lithium battery curve charge							
Interface	RS232 interface, Support SCPI commands							
	Optional RS485 interface, support ModBus							
	Optional RS232 to USB cable							
	Optional 0-5V analog control							
Memory	300 sets							
Insulation	Between base and terminals: ≥20MΩ/500VDC							
	Between base and AC power cord: ≥30MΩ/500VDC							
Operating environment	Indoor use			Altitude: ≤2000m		Ambient temperature: 0~40°C		
	Relative humidity: ≤80%			Installation category: II		Pollution degree: 2		
Storage environment	-10°C~70°C, ≤70%RH							
Power source	AC110V/220V±10% selectable, 50/60Hz							
Accessories	Power cord x1, Operation manual x1, RS232 cable x1, Software CD x1							
Dimension	215Wx89Hx352D mm							
Weight	8kg	8kg	6.8kg	6.8kg	6.8kg	8kg	8kg	8kg

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Programmable Linear DC Power Supply



Specifications (120W ~ 375W)

Model	PPM-2010	PPM-3010	PPM-7503	PPM-7505	PPM-12001	PPM-12002	PPM15H15
Rated output (0°C~40°C)							
Voltage	0~22V	0~32V	0~80V	0~80V	0~128V	0~128V	0~160V
Current	0~11A	0~11A	0~3.2A	0~5.5A	0~1.1A	0~2.2A	0~1.6A
O.V.P	0.1~24V	0.1~36V	0.1~84V	0.1~84V	0.1~134V	0.1~134V	0.1~180V
O.C.P	0.1~12A	0.1~12A	0.1~3.6A	0.1~6.0A	0.1~1.2A	0.1~2.4A	0.1~1.8A
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); ≤2mVrms (I>3A); ≤3mVrms (V≥75V) (5Hz~1MHz)						
Recovery time	≤100us (50% load change, minimum load 0.5A)						
Constant Current Operation							
Line regulation	≤0.1%+3mA						
Load regulation	≤0.1%+3mA (I≤3A); ≤0.1%+5mA (I>3A)						
Ripple & Noise	≤3mArms (I≤3A), ≤6mArms (I>3A)						
Display							
Voltmeter	5 digits LCD display						
Ammeter	5 digits LCD display						
Setting resolution	1mV/1mA		2mV/0.1mA		10mV/0.1mA		
Reading resolution	1mV/1mA		1mV/0.1mA		10mV/0.1mA		
Setting accuracy	Voltage	±(0.03% of reading + 10mV) (25±5°C)					
	Current	±(0.1% of reading + 0.1% of FS) (25±5°C)					
Reading accuracy	Voltage	±(0.02% of reading + 5mV) (25±5°C)					
	Current	±(0.1% of reading + 0.1% of FS) (25±5°C)					
General							
Protection	Over load, over voltage, over current, over temperature and reverse polarity protections						
Panel lock	Provided						
Remote sense function	Maximum compensation voltage 5% of FS						
Battery charge	Lithium battery curve charge						
Interface	RS232 interface, Support SCPI commands						
	Optional RS485 interface, support ModBus						
	Optional RS232 to USB cable						
	Optional 0-5V analog control						
Memory	300 sets						
Insulation	Between base and terminals: ≥20MΩ/500VDC						
	Between base and AC power cord: ≥30MΩ/500VDC						
Operating environment	Indoor use		Altitude: ≤2000m		Ambient temperature: 0~40°C		
	Relative humidity: ≤80%		Installation category: II		Pollution degree: 2		
Storage environment	-10°C~70°C, ≤70%RH						
Power source	AC110V/220V±10% selectable, 50/60Hz						
Accessories	Power cord x1, Operation manual x1, RS232 cable x1, Software CD x1						
Dimension	215Wx89Hx352D mm						
Weight	8kg	8.5kg	8kg	8kg	8.5kg	6.8kg	6.8kg

Programmable Linear DC Power Supply



Specifications (240W ~ 360W)

Model	PPM-1820		PPM-12003		PPM-3H12		PPM-5H07	
Rated output (0°C~40°C)								
Voltage	0~19V		0~128V		0~330V		0~500V	
Current	0~21A		0~3.2A		0~1.2A		0~0.7A	
O.V.P	0.1~21V		0.1~134V		0.1~360V		0.1~550V	
O.C.P	0.1~22A		0.1~3.6A		0.01~1.32A		0.01~0.8A	
Constant Voltage Operation								
Line regulation	≤0.01%+3mV							
Load regulation	≤0.01%+3mV (I≤3A); ≤0.02%+5mV (I>3A)							
Ripple & Noise (5Hz~1MHz)	≤1mVrms		≤2.5mVrms		≤10mVrms		≤10mVrms	
Recovery time	≤100us (50% load change, minimum load 0.5A)							
Constant Current Operation								
Line regulation	≤0.1%+3mA							
Load regulation	≤0.05%+3mA (I≤3A); ≤0.05%+5mA (I>3A)							
Ripple & Noise	≤5mAms		≤1mAms		≤1mAms		≤1mAms	
Display								
Voltmeter	5 digits LCD display							
Ammeter	5 digits LCD display							
Setting resolution	1mV/1mA		10mV/0.1mA		10mV/0.1mA		10mV/0.1mA	
Reading resolution	1mV/1mA		10mV/0.1mA		10mV/0.1mA		10mV/0.1mA	
Setting accuracy (25±5°C)	Voltage	±(0.03% of reading + 10mV)			±(0.03% of reading + 30mV)			
	Current	±(0.1% of reading + 0.1% of FS)						
Reading accuracy (25±5°C)	Voltage	±(0.02% of reading +5mV)			±(0.02% of reading +30mV)			
	Current	±(0.1% of reading + 0.1% of FS)						
General								
Protection	Over load, over voltage, over current, over temperature and reverse polarity protections							
Panel lock	Provided							
Remote sense function	Max. compensation voltage 0.5 of FS				X		X	
Battery charge	Lithium battery curve charge							
Interface	RS232 interface, Support SCPI commands							
	Optional RS485 interface, support ModBus							
	Optional RS232 to USB cable							
	Optional 0-5V analog control				X		X	
Memory	100 sets							
Insulation	Between base and terminals: ≥20MΩ/500VDC							
	Between base and AC power cord: ≥30MΩ/500VDC							
Operating environment	Indoor use		Altitude: ≤2000m		Ambient temperature: 0~40°C			
	Relative humidity: ≤80%		Installation category: II		Pollution degree: 2			
Storage environment	-10°C~70°C, ≤70%RH							
Power source	AC110V/220V±10% selectable, 50/60Hz							
Accessories	Power cord x1, Operation manual x1, RS232 cable x1, Software CD x1							
Dimension	215Wx89Hx412D mm							
Weight	9.8kg		9.8kg		10.2kg		10.2kg	

Specifications are subject to change without prior notice.

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