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, 100 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)
- ✓ Low resistance measurement function, 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)

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Programmable Linear DC Power Supply

Product photo

PPM-7505

PPM-1820

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Programmable Linear DC Power Supply

Specifications (90W ~ 180W)

Model		PPM-3603D		PPM-3605D		PPM-3603	PPM-3605	PPM-6003
Rated output (0℃~40℃)								
Output		0~36V	0~15A	0~36V	0~15A	0~36V	0~36V	0~60V
Output		0~3A	0~6A	0~5A	0~10A	0~3A	0~5A	0~3A
O.V.P		0.1~40V		0.1~40V		0.1~40V	0.1~40V	0.1~64V
O.C.P		0.1~6.5A		0.1~11A		0.1~3.5A	0.1~5.5A	0.1~3.5A
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 (I≤3A); ≤2mVrms (I>3A)						
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 resolution		1mV/0.1mA		1mV/1mA		1mV/0.1mA	1mV/0.1mA	1mV/0.1mA
Reading resolution		1mV/0.1mA		1mV/1mA		1mV/0.1mA	1mV/0.1mA	1mV/0.1mA
Setting accuracy	Voltage	±(0.03% of reading + 10mV)						
(25±5℃)	Current	±(0.2% of reading + 10mA)						
Reading accuracy	Voltage	±(0.02% of reading +5mV)						
(25±5℃)	Current	±(0.05% of reading +5mA)						
General								
Protection		Over load, over voltage, over current, over temperature and reverse polarity protections						
Panel lock		Provided						
Remote sense function		Maximum compensation voltage 0.1V@ Maximum output						
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		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℃			
		Relative humidity: ≤80%	Installation category: II		Pollution degree: 2			
Storage environment		-10℃~70℃, ≤70%RH						
Power source		AC110V/220V±10% selectable, 50/60Hz						
Accessories		Power cord x1, Operation manual x1, RS232 cable x1, Software CD x1, Test lead x1						
Dimension (WxHxD)		215x89x352mm						
Weight		8kg		8kg		6.8kg	8kg	8kg

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Programmable Linear DC Power Supply

Specifications (120W ~ 375W)

Model		PPM-2010	PPM-3010	PPM-6005	PPM-7503	PPM-7505	PPM-12001
Rated output (0℃~40℃)							
Output		0~20V	0~30V	0~60V	0~75V	0~75V	0~120V
Output		0~10A	0~10A	0~5A	0~3A	0~5A	0~1A
O.V.P		0.1~24V	0.1~34V	0.1~64V	0.1~80V	0.1~80V	0.1~132V
O.C.P		0.1~11A	0.1~11A	0.1~5.5A	0.1~3.5A	0.1~5.5A	0.1~1.1A
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 (I≤3A); ≤2mVrms (I>3A); ≤3mVrms (V≥75V)					
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 resolution		1mV/1mA	1mV/1mA	1mV/0.1mA	2mV/0.1mA	2mV/0.1mA	10mV/0.1mA
Reading resolution	Voltage	1mV	1mV	1mV	1mV	1mV	≥100V: 10mV <100V: 1mV
	Current	1mA	1mA	0.1mA	0.1mA	0.1mA	0.1mA
Setting accuracy (25±5℃)	Voltage	±(0.03% of reading + 10mV)					
	Current	±(0.2% of reading + 10mA)					
Reading accuracy (25±5℃)	Voltage	±(0.02% of reading +5mV)					
	Current	±(0.05% of reading +5mA)					
General							
Protection		Over load, over voltage, over current, over temperature and reverse polarity protections					
Panel lock		Provided					
Remote sense function		Maximum compensation voltage 0.1V@ Maximum output					
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		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℃			
		Relative humidity: ≤80%	Installation category: II	Pollution degree: 2			
Storage environment		-10℃~70℃, ≤70%RH					
Power source		AC110V/220V±10% selectable, 50/60Hz					
Accessories		Power cord x1, Operation manual x1, RS232 cable x1, Software CD x1, Test lead x1					
Dimension (WxHxD)		215x89x352mm					
Weight		8kg	8.5kg	8kg	8kg	8.5kg	6.8kg

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Programmable Linear DC Power Supply

Specifications (240W ~ 360W)

Model		PPM-0830	PPM-1820	PPM-12003	PPM-3H12	PPM-5H07
Rated output (0℃~40℃)						
Output		0~8V	0~18V	0~120V	0~300V	0~500V
Output		0~30A	0~20A	0~3A	0~1.2A	0~0.7A
O.V.P		0.1~10V	0.1~21V	0.1~140V	0.1~360V	0.1~550V
O.C.P		0.1~32A	0.1~22A	0.1~3.5A	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	≤1mVrms	≤2.5mVrms	≤10mVrms	≤10mVrms
Recovery time		≤100us (50% load change, minimum load 0.5A)				
Constant Current Operation						
Line regulation		≤0.2%+3mA				
Load regulation		≤0.05%+3mA (I≤3A); ≤0.05%+5mA (I>3A)				
Ripple & Noise		≤10mAms	≤5mAms	≤1mAms	≤1mAms	≤1mAms
Display						
Voltmeter		5 digits LCD display				
Ammeter		5 digits LCD display				
Setting resolution		1mV/1mA	1mV/1mA	10mV/1mA	10mV/0.1mA	10mV/0.1mA
Reading resolution		1mV/1mA	1mV/1mA	10mV/1mA	10mV/0.1mA	10mV/0.1mA
Setting accuracy (25±5℃)	Voltage	±(0.03% of reading + 10mV)				
	Current	±(0.2% of reading + 20mA)		±(0.2% of reading + 5mA)	±(0.2% of reading + 1mA)	
Reading accuracy (25±5℃)	Voltage	±(0.02% of reading +5mV)				
	Current	±(0.05% of reading +10mA)			±(0.05% of reading +5mA)	
General						
Protection		Over load, over voltage, over current, over temperature and reverse polarity protections				
Panel lock		Provided				
Remote sense function		Max. compensation voltage 0.1V@ Max. output			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 Relative humidity: ≤80%		Altitude: ≤2000m Installation category: II	Ambient temperature: 0~40℃ Pollution degree: 2	
Storage environment		-10℃~70℃, ≤70%RH				
Power source		AC110V/220V±10% selectable, 50/60Hz				
Accessories		Power cord x1, Operation manual x1, RS232 cable x1, Software CD x1,		Power cord x1, Operation manual x1, RS232 cable x1, Software CD x1, Test lead x1		
Dimension (WxHxD)		215x89x412mm				
Weight		9.8kg	9.8kg	9.8kg	10.2kg	10.2kg

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