High Power Programmable AC Power Source

RoHS Compliant CE

Your Power House
VP ELECTRONIQUE

NEW Version

VPV Series

VPV series is a programmable AC power source that can be remotely controlled and integrated with other systems for automatic testing. VPV series provides precise output voltage and frequency which could reach various types of industrial requirements. For the industrial users, such as home appliances, electrical and electronic, medical equipment and lighting, they are able to quickly and accurately simulate standard or abnormal power status via programmable function.

VPV series has built-in standard programmable features, such as STEP and RAMP features, which are ideal for laboratories, certification and R&D institution's compliance test. The user-friendly touch screen supports users to operate VPV series intuitively and easily, and the users can remote control the unit via the standard RS-232, RS485 or Ethernet (Optional for Analog, GPIB) interface. The AC source is coupled with output voltage range of 0~310V and output frequency of standard 45~120Hz or optional 45~500Hz. Moreover, the VPV series provides complete product protections, such as OVP, UVP, OCP, OPP, OTP and short circuit protection.

Product Features

- CE & RoHS certificated.
- Modularized inverter which is compact, smaller, high power density and easy to maintain.
- 7" touch screen which can display the phase voltage, current, frequency, active/apparent power, power factor and test information.
- Ability to simulate abnormal power status: STEP and RAMP modes allow users to set sequences of start/end voltage,frequency and running time with ease.
- Comprehensive protections include output undervoltage/overvoltage, overcurrent, overload, input undervoltage / overvoltage, overheat and other more than twenty fault conditions.
- Three-phase voltage independently adjustable function: each phase voltage can be adjusted independently; therefore VPV can power more than one single-phase loads.
- Phase angle adjustment function: can adjust the phase angle between each phase (for three phase system).

Output Power

10kVA~2000kVA

Interfaces

Standard **RS-232** RS-485 **Ethernet**

Option **GPIB** **Analog**

Applications

- Home Appliance
- Laboratory/Certification Bureau
- Industrial Power Supply
- Motor & Compressor
- IT / SMT Production Line
- Renewable Energy
- Medical Industry

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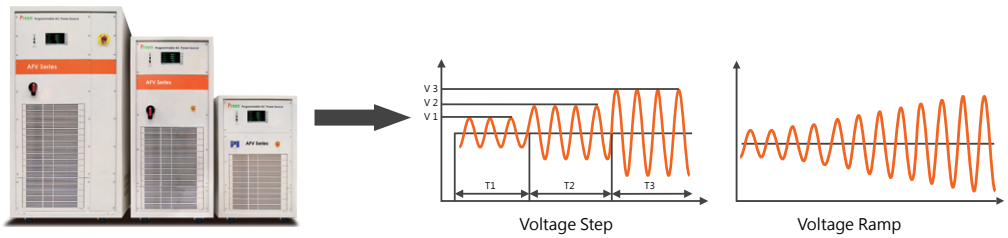
User-friendly Touch Screen and Remote Control

VPV series is equipped with a 7” touch screen. The intuitive and easy-to-use touch screen allows users to set test sequences immediately and precisely. Through the control interfaces (RS-232 / RS-485 / Ethernet / GPIB / Analog), users can set the desired output parameters and monitor the output value remotely.

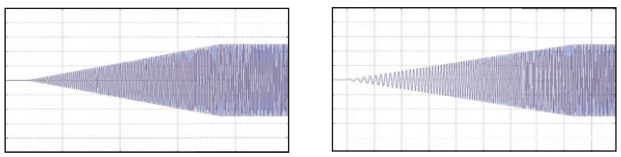
STEP / RAMP Mode



For VPV STEP mode, users can set voltage or frequency steps easily with 24 built-in memory groups and 255 cycles. Because of the widely used in motor or home appliance industry, the output voltage, output frequency, and running time of each step are designed to be easily set in the memory groups.

With VPV RAMP mode, 12 built-in memory groups and 255 cycles allows users set voltage or frequency remotely or through the touch screen. Users can set up output voltage, output frequency, the number of start/end groups.

Soft Start Function (Opt.)



Variable Voltage Constant Frequency (VVCF)

Variable Voltage Variable Frequency (VVVF)

Soft start function can effectively reduce the starting current of motor load or inductive load. The users have more flexibility on selection of power capacity and more efficiency on space usage. They can purchase more cost-effective products.VP

Wide Variety of Applications

With its high reliability, capability of complex power line simulation and high output power, the VPV series has been widely applied for applications on home appliance, electric vehicle charger, motor, electronics and medical equipment. It is a AC power source suitable from R&D verification to mass production testing.

SPECIFICATIONS

Your Power House
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VPV Series Single-Phase Output (10kVA - 120kVA)

Model		VPV-31010	VPV-31015	VPV-31030	VPV-31045	VPV-31060	VPV-31080	VPV-31100	VPV-31120
INPUT									
Phase		3Ø / 3 Wire + G							
Voltage		380VAC ±15% (option:208VAC,220VAC)		380VAC ±15% (option: 480VAC)					
Frequency		50Hz ± 3Hz or 60Hz ± 3Hz							
Max. Current[*1]		23A	34A	67A	100A	133A	198A	248A	297A
Power Factor		≥ 0.9 (Max. Power)						≥ 0.85 (Max. Power)	
Power	(VA)	10kVA	15kVA	30kVA	45kVA	60kVA	80kVA	100kVA	120kVA
Phase		1Ø / 2 Wire + G							
Voltage Ranges	Low(V)	0V-155.0V (L-N)							
	High(V)	0V-310.0V (L-N)							
Voltage Resolution		0.1V							
Voltage Accuracy		0.5% F.S.+ 4 counts							
Frequency Range [*2]		Standard : 45 ~ 120Hz Option : 45 ~ 500Hz							
Frequency Resolution		0.1Hz							
Frequency Accuracy		± 0.02 % F.S.							
Max. Current (RMS)	Low(A)	83.3A	125A	250A	375A	500A	666.7A	833.3A	1000A
	High(A)	41.7A	62.5A	125A	187.5A	250A	333.3A	416.7A	500A
Line Regulation		≦ 1%							
Load Regulation		≦ 1% (Resistive Load)							
Total Harmonic Distortion (THD)[*3]		≦ 1% (Resistive Load)							
Response Time		≦ 2ms							
Crest Factor		≥3							
Voltage Range		0V-310.0V							
Voltage Resolution		0.1V							
Voltage Accuracy		0.5% F.S.+ 4 counts							
Frequency Range		45.0-500.0Hz							
Frequency Resolution		0.1Hz							
Frequency Accuracy		± 0.02 % F.S.							
Current Range (RMS)		0 - 83.3A	0 - 125A	0 - 250A	0 - 375A	0 - 500A	0 - 666.7A	0 - 833.3A	0 - 1000A
Current Resolution (RMS)		0.1A							
Current Accuracy (RMS)		0.5% F.S.+4 counts							
Power Range		0 - 10kW	0 - 15kW	0 - 30kW	0 - 45kW	0 - 60kW	0 - 80kW	0 - 100kW	0 - 120kW
Power Resolution		0.1kW							
Power Accuracy		1% F.S.+6 counts							
Efficiency		≥90% at Max. Power						≥85% at Max. Power	
HMI		Touch Screen , 7" Color TFT LCD							
Program Mode		STEP : 24 sets / 255 cycles. (Volt./Freq./Time) RAMP : 12 sets / 255 cycles. (Volt./Freq./Time)							
Protection		Input : N.F.B, Over Voltage, Under Voltage / Output : Over Voltage, Over Current, Reverse Current, Over Temperature							
Remote Interface		Standard : RS-232(SCPI)&RS-485(MODBUS) /Ethernet(SCPI) Option : GPIB, Analog Control							
Opertional Temperature		0°C~45°C							
Humidity		0~90% (Non condensing)							
Altitude		< 1,500m							
Dimensions (H x W x D) [*4]		1045 x 600 x 800 mm (including wheels)	1440 x 600 x 800 mm (including wheels)		1645 x 800 x 800 mm (including wheels)		1800 x 1050 x 970 mm	1900 x 1150 x 1220 mm	
		41.1 x 23.6 x 31.5 inch (including wheels)	56.7 x 23.6 x 31.5 inch (including wheels)		64.8 x 31.5 x 31.5 inch (including wheels)		70.9 x 41.3 x 38.2 inch	74.8 x 45.3 x 48.0 inch	
Weight [*4]		225kg	270kg	440kg	560kg	650kg	750kg	940kg	1100kg
		496.1lbs	595.4lbs	970.2lbs	1234.8lbs	1433.3lbs	1653.8lbs	2072.7lbs	2425.5lbs

*1 The max. current is based on rated input voltage of 380V. *2 For 45~500Hz option, please contact us for output power characteristic curve.

*3 When the output voltage is at Low : 90 - 140V or High 180 - 280V with load power factor of 1.

*4 Dimensions and weight are for input voltage 220/380V. Please contact us for dimensions and weight for other input voltage.

* All specifications are subject to change without notice. The specifications are tested at ambient temperature of 25℃ ± 5℃ .

SPECIFICATIONS

VPV Series Three-Phase Output (10kVA - 120kVA)

Model		VPV-33010	VPV-33015	VPV-33030	VPV-33045	VPV-33060	VPV-33080	VPV-33100	VPV-33120
INPUT									
Phase		3Ø / 3 Wire + G							
Voltage		380VAC ±15% (option: 208VAC, 220VAC)		380VAC ±15% (option: 480VAC)					
Frequency		50Hz±3Hz or 60Hz±3Hz							
Max. Current[*1]		23A	34A	67A	100A	133A	198A	248A	297A
Power Factor		≥ 0.9 (Max. Power)					≥0.85 (Max. Power)		
Power	(VA)	10kVA	15kVA	30kVA	45kVA	60kVA	80kVA	100kVA	120kVA
Phase		3Ø / 4 Wire + G							
Voltage Ranges	Low(V)	0V-155.0V (L-N)							
	High(V)	0V-310.0V (L-N)							
Voltage Resolution		0.1V							
Voltage Accuracy		0.5% F.S.+4 counts							
Frequency Range [*2]		Standard : 45~120Hz Option : 45-500Hz							
Frequency Resolution		0.1Hz							
Frequency Accuracy		± 0.02% F.S.							
Max. Current (RMS)	Low(A)	27.8A	41.7A	83.3A	125A	166.7A	222.2A	277.8A	333.3A
	High(A)	13.9A	20.8A	41.7A	62.5A	83.3A	111.1A	138.9A	166.7A
Line Regulation		≦ 1%							
Load Regulation		≦ 1% (Resistive Load)							
Total Harmonic Distortion(THD)[*3]		≦ 1% (Resistive Load)							
Response Time		≦ 2ms							
Crest Factor		≥3							
Voltage Range		0V-310.0V							
Voltage Resolution		0.1V							
Voltage Accuracy		0.5% F.S.+4 counts							
Frequency Range		45.0-500.0Hz							
Frequency Resolution		0.1Hz							
Frequency Accuracy		± 0.02% F.S.							
Current Range(RMS)		0 - 27.8A	0 - 41.7A	0 - 83.3A	0 - 125A	0 - 166.7A	0 - 222.2A	0 - 277.8A	0 - 333.3A
Current Resolution(RMS)		0.1A							
Current Accuracy(RMS)		0.5% F.S.+4 counts							
Power Range		0 - 10kW	0 - 15kW	0 - 30kW	0 - 45kW	0 - 60kW	0 - 80kW	0 - 100kW	0 - 120kW
Power Resolution		0.1kW							
Power Accuracy		1% F.S.+6 counts							
Efficiency		≥90% at Max. Power					≥0.85 at Max. Power		
HMI		Touch Screen , 7" Color TFT LCD							
Program Mode		STEP : 24 sets / 255 cycles. (Volt./Freq./Time) RAMP : 12 sets / 255 cycles. (Volt./Freq./Time)							
Protection		Input : N.F.B, Over Voltage, Under Voltage / Output : Over Voltage, Over Current, Reverse Current, Over Temperature							
Remote Interface		Standard : RS-232(SCPI)&RS-485(MODBUS) /Ethernet(SCPI) Option : GPIB, Analog Control							
Opertional Temperature		0°C~45°C							
Humidity		0~90% (Non condensing)							
Altitude		< 1,500m							
Dimensions (H x W x D) [*4]		1045 x 600 x 800 mm (including wheel)	1440 x 600 x 800 mm (including wheel)		1645 x 800 x 800 mm (including wheel)		1800 x 1050 x 970 mm		1900 x 1150 x 1220 mm
		41.1 x 23.6 x 31.5 inch (including wheel)	56.7 x 23.6 x 31.5 inch (including wheel)		64.8 x 31.5 x 31.5 inch (including wheel)		"70.9 x 41.3 x 38.2 inch"		74.8 x 45.3 x 48.0 inch
Weight [*4]		255kg	295kg	390kg	540kg	650kg	1000kg	1170kg	1450kg
		562.3lbs	650.5lbs	860lbs	1190.7lbs	1433.3lbs	2205lbs	2579.85lbs	3197.3lbs

*1 The max. current is based on rated input voltage of 380V. *2 For 45~500Hz option, please contact us for output power characteristic curve.
*3 When the output voltage is at Low : 90 - 140V or High 180 - 280V with load power factor of 1.
*4 Dimensions and weight are for input voltage 380V. Please contact us for dimensions and weight for other input voltage.
* All specifications are subject to change without notice. The specifications are tested at ambient temperature of 25℃ ± 5℃ .

SPECIFICATIONS

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VPV Series Three-Phase Output (160kVA - 1600kVA)

Model		VPV-33160	VPV-33240	VPV-33300	VPV-33400	VPV-33500	VPV-33640	VPV-33800	VPV-331000	VPV-331200	VPV-331600
INPUT											
Phase		3Ø / 4 Wire + G (option: 3Ø / 3 Wire + G)									
Voltage[*1]		220/380Vac ±15% (option : 277/480Vac, 240Vac or 400Vac)									
Frequency		50Hz±3Hz or 60Hz±3Hz									
Max. Current[*2]		336A	504A	629.1A	838.8A	1048.5A	1343A	1677.7A	2097.1A	2516.5A	3356A
Power Factor		≥ 0.85 (Max. Power)									
Power	(VA)	160kVA	240kVA	300kVA	400kVA	500kVA	640kVA	800kVA	1000kVA	1200kVA	1600kVA
Phase		3Ø / 4 Wire + G									
Voltage Ranges	Low(V)	0V-150.0V (L-N)									
	High(V)	0V-300.0V (L-N)									
Voltage Resolution		0.1V									
Voltage Accuracy		0.5% F.S.+4 counts									
Frequency Range [*3]		Standard : 45~65Hz Option : 45-500Hz									
Frequency Resolution		0.1Hz									
Frequency Accuracy		± 0.02 % F.S.									
Max. Current (RMS)	Low(A)	444.4A	666.7A	833.3A	1111.1A	1388.9A	1777.8A	2222.2A	2777.8A	3333.3A	4444.4A
	High(A)	222.2A	333.3A	416.7A	555.6A	694.4A	888.9A	1111.1A	1388.9A	1666.7A	2222.2A
Line Regulation		≦ 1%									
Load Regulation		≦ 1% (Resistive Load)									
Total Harmonic Distortion(THD) [*4]		≦ 2% (Resistive Load)									
Response Time		≦ 2ms									
Voltage Range		0V-300.0V									
Voltage Resolution		0.1V									
Voltage Accuracy		0.5% F.S.+4 counts									
Frequency Range		45.0-500.0Hz									
Frequency Resolution		0.1Hz									
Frequency Accuracy		± 0.02 % F.S.									
Current Range (RMS)		0 - 444.4A	0 - 666.7A	0 - 833.3A	0 - 1111.1A	0 - 1388.9A	0 - 1777.8A	0 - 2222.2A	0 - 2777.8A	0 - 3333.3A	0 - 4444.4A
Current Resolution (RMS)		0.1A									
Current Accuracy (RMS)		0.5% F.S.+4 counts									
Power Range		0-160kW	0-240kW	0 - 300kW	0 - 400kW	0 - 500kW	0 - 640kW	0 - 800kW	0 - 1000kW	0 - 1200kW	0 - 1600kW
Power Resolution		0.1kW									
Power Accuracy		1% F.S.+6 counts									
Efficiency		≥ 0.85 at Max. Power									
HMI		Touch Screen , 7" Color TFT LCD									
Program Mode		STEP : 24 sets / 255 cycles. (Volt./Freq./Time) GRADUAL : 12 sets / 255 cycles. (Volt./Freq./Time)									
Protection		Input : N.F.B, Over Voltage, Under Voltage, Output : Over Voltage, Over Current, Reverse Current, Over Temperature.									
Remote Interface		Standard : RS-485/RS-232 Option : GPIB, Ethernet									
Opertional Temperature		0°C~45°C									
Humidity		0~90% (Non condensing)									
Altitude		< 1,500m									
Dimensions (H x W x D) [*5]		1900 x 1150 x 1240 mm/ 74.8 x 45.3 x 48.8 inch		2050 x 3880 x 1539 mm/ 80.7 x 152.8 x 60.6 inch			2050 x 4716 x 1520 mm / 80.7 x 185.7 x 59.8 inch		2050 x 6003 x 1520 mm/ 80.7 x 236.3 x 59.8 inch	2200 x 10827 x 1590 mm / 86.6 x 426.3 x 62.6 inch	
Weight [*5]		1850kg	2800kg	3450kg	4450kg	5550kg	7800kg	8800kg	10550kg	16000kg	17600kg
		4079.3lbs	6174lbs	7607.3lbs	9812.3lbs	12237.8lbs	17199lbs	19404lbs	23262.8lbs	35280lbs	38808lbs

*1 200V and 400V input options are 3Ø / 3 Wire + G. Please contact us for other input voltage specifications. *2 The max. current is based on rated input voltage of 220/380V.

*3 For 45~500Hz option, please contact us for output power characteristic curve. *4 When output frequency is at 45-65Hz and output voltage is 90V-140V(Low Range) or 180V-280V(High Range) and with resistive load.

*5 Dimensions and weight are for input voltage 220/380V(3Ø/4W+G) . Please contact us for dimensions and weight for other input voltage.

* All specifications are subject to change without notice. The specifications are tested at ambient temperature of 25°C ± 5°C.

ORDERING INFORMATION

VPV Series Single-Phase Output (10kVA - 150kVA)

Model Number	Description
VPV-31010	High Power Programmable AC Power Source (10kVA/310V/45-120Hz)
VPV-31015	High Power Programmable AC Power Source (15kVA/310V/45-120Hz)
VPV-31030	High Power Programmable AC Power Source (30kVA/310V/45-120Hz)
VPV-31045	High Power Programmable AC Power Source (45kVA/310V/45-120Hz)
VPV-31060	High Power Programmable AC Power Source (60kVA/310V/45-120Hz)
VPV-31080	High Power Programmable AC Power Source (80kVA/310V/45-120Hz)
VPV-31100	High Power Programmable AC Power Source (100kVA/310V/45-120Hz)
VPV-31120	High Power Programmable AC Power Source (120kVA/310V/45-120Hz)
VPV-001	Output Frequency 45Hz-500Hz
VPV-002	Soft Start Mode
VPV-005	GPIB Interface
VPV-007	Overload Capability 200% 2 sec, 150% 5 sec, 125% 15 sec

VPV Series Three-Phase Output (10kVA - 2000kVA)

Model Number	Description
VPV-33010	High Power Programmable AC Power Source (10kVA/310V/45-120Hz)
VPV-33015	High Power Programmable AC Power Source (15kVA/310V/45-120Hz)
VPV-33030	High Power Programmable AC Power Source (30kVA/310V/45-120Hz)
VPV-33045	High Power Programmable AC Power Source (45kVA/310V/45-120Hz)
VPV-33060	High Power Programmable AC Power Source (60kVA/310V/45-120Hz)
VPV-33080	High Power Programmable AC Power Source (80kVA/310V/45-120Hz)
VPV-33100	High Power Programmable AC Power Source (100kVA/310V/45-120Hz)
VPV-33120	High Power Programmable AC Power Source (120kVA/310V/45-120Hz)
VPV-33160	High Power Programmable AC Power Source (160kVA/310V/45-120Hz)
VPV-33240	High Power Programmable AC Power Source (240kVA/310V/45-120Hz)
VPV-33300	High Power Programmable AC Power Source (300kVA/310V/45-120Hz)
VPV-33400	High Power Programmable AC Power Source (400kVA/310V/45-120Hz)
VPV-33500	High Power Programmable AC Power Source (500kVA/310V/45-120Hz)
VPV-33640	High Power Programmable AC Power Source (640kVA/310V/45-120Hz)
VPV-33800	High Power Programmable AC Power Source (800kVA/310V/45-120Hz)
VPV-331000	High Power Programmable AC Power Source (1000kVA/310V/45-120Hz)
VPV-331200	High Power Programmable AC Power Source (1200kVA/310V/45-120Hz)
VPV-331600	High Power Programmable AC Power Source (1600kVA/310V/45-120Hz)
VPV-001	Output Frequency 45Hz-500Hz
VPV-002	Soft Start Mode
VPV-003	Three Phase Independent Adjustment
VPV-004	Three Phase Angle Adjustment
VPV-005	GPIB Interface
VPV-007	Overload Capability 200% 2 sec, 150% 5 sec, 125% 15 sec