



Your Power House

VP ELECTRONIQUE

High Power Programmable AC Power Source

VPV⁺ series

10kVA~2000kVA



Interfaces

● Standard

● Option



Applications

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

NEW



- 0~300V output voltage and 45~65Hz output frequency (opt. 45~500Hz)
- The built-in STEP and RAMP functions are ideal to simulate different types of power line disturbances.
- The SOFT START feature can effectively reduce inrush current caused by motor startup.
- Via the Three Phase Independent Adjustment function, the VPV⁺ series can deliver each phase voltage differently to multiple single-phase DUTs.
- User can simulate phase shift with the optional Phase Angle Control function.
- The 7" touch screen shows parameters of voltage, current, frequency, real power, apparent power and sum of each phase's parameters.
- Complete protections include UVP, OVP, OCP, input UVP/OVP, OTP and other 29 protections. The built-in Error Log can record up to 255 error messages for easier trouble shooting.
- CE & RoHS certified.
- Optional remote sensing feature is available to improve precision.

VPV⁺ Series

The VPV⁺ series is a high power programmable AC power source utilizing advanced PWM technology to deliver power with THD $\leq 0.5\%$ and up to 2000kVA. The output frequency is 45~65Hz with accuracy of $\pm 0.02\%$, and user can select 45~500Hz option to expand the frequency. The VPV⁺ series is ideal to simulate different region's voltage and frequency conditions, and can cover applications for home appliance, motor, medical equipment, lighting and EMC laboratory.

The VPV⁺ series features STEP and RAMP programmable functions to easily simulate single or continuous output changes. Three phase independent adjustment, optional remote sensing and optional phase angle adjustment all provide convenient control to simulate different kinds of line disturbance. These features are ideal for test applications of R&D design verification, quality assurance and production checks. For remote control, the VPV⁺ series has standard RS-232/RS-485/RS-422 interface card and optional GPIB and Ethernet interfaces for easy setup and programming.

Intuitive 7" Touch Screen



The VPV + series employs 7" touch screen to provide intuitive and easy-to-use control and display. Users can quickly access output settings and measurements, including voltage, current, frequency, real power, apparent power, PF and sum of each phase's parameters. Complex sequences and system configurations can also be easily done via the touch screen.

Three Phase Independent Adjustment & Phase Angle Control



3-Phase Independent Adjustment



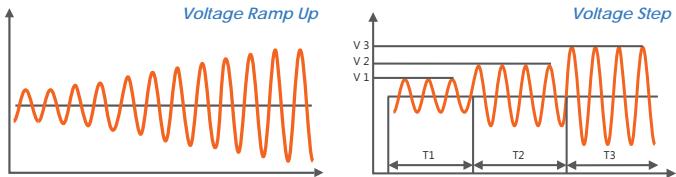
Phase Angle Control (Opt.)

The Three Phase Independent Adjustment feature of the VPV + series can simulate advanced power line disturbance, such as three-phase voltage unbalanced. User can press the icon on the main page of the touch screen to quickly switch from balanced voltage setting  to independent voltage adjustment setting . Optional Angle Control is also available to simulate phase shift for different power conditions.

RAMP and STEP programming features



STEP Setting (24 sequences)



The VPV + series' RAMP feature has up to 12 sequences available with parameters of voltage, frequency and time, and the STEP feature has up to 24 sequences available with parameters of voltage, frequency and time. These features provide an easy method to simulate different kinds of power line disturbance.

Remote Control Software



The VPV + series offers complimentary remote control software. This graphical user interface provides easy settings and user-friendly configurations for users to fully control the unit. The Program includes GENERAL mode or PROGRAMMABLE mode with STEP and RAMP features available. The preview waveform and report functions also greatly enhance convenience for on review parameters and results before or after testing.

Remote Interfaces



For easy setup and programming, the VPV + series has standard RS-232/RS-485/RS-422 interface card. User also can select optional GPIB and Ethernet interfaces for different remote control requirements.

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

Model	VPV-PLUS -31010	VPV-PLUS -31015	VPV-PLUS -31020	VPV-PLUS -31030	VPV-PLUS -31045	VPV-PLUS -31060	VPV-PLUS -31075	VPV-PLUS -31100	VPV-PLUS -31150		
INPUT											
Phase	3Ø / 4 Wire + G										
Voltage ^{*1}	220V/380V±15%										
Frequency	47 - 63Hz										
Max. Current ^{*2}	18.7A	28.1A	37.4A	56.1A	84.2A	112.2A	140.3A	209.7A	314.6A		
Power Factor	≥ 0.9 (Max. Power)										
OUTPUT											
Power	VA	10kVA	15kVA	20kVA	30kVA	45kVA	60kVA	75kVA	100kVA		
Phase		1Ø / 2 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		Standard : 45-65Hz Option : 45-500Hz									
Frequency Resolution		0.1Hz									
Frequency Accuracy		±0.02% F.S.									
Max. Current (RMS)	Low(A)	83.3A	125A	166.7A	250A	375A	500A	625A	833.3A	1250A	
	High(A)	41.7A	62.5A	83.3A	125A	187.5A	250A	312.5A	416.7A	625A	
Line Regulation		< 0.5%									
Load Regulation		≤ 0.5% (Resistive Load)									
Total Harmonic Distortion (THD) ^{*3}		≤ 0.5% (Resistive Load)									
Response Time		≤ 1ms									
Crest Factor		≥ 3									
MEASUREMENT											
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		0.01Hz									
Frequency Accuracy		±0.02% F.S.									
Current Range (RMS)		0-83.3A	0-125A	0-166.7A	0-250A	0-375A	0-500A	0-625A	0-833.3A	0-1250A	
Current Resolution (RMS)		0.1A									
Current Accuracy (RMS)		0.5% F.S.+4 counts									
Power Range		0-10kW	0-15kW	0-20kW	0-30kW	0-45kW	0-60kW	0-75kW	0-100kW	0-150kW	
Power Resolution		0.1kW									
Power Accuracy		1% F.S.+6 counts									
GENERAL											
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)										
Soft Start	Setting : Rated Volt. / Rated Freq. / Start Volt. / Start Freq. / Delay Time / Ramp Time										
Protection	Input : Input N.F.B, Over Voltage, Under Voltage, Output : Over Voltage, Over Current, Reverse Current, Over Temperature and machine will display the error code and give a warning sound.										
Remote Interface	Standard : RS-232/RS-422/RS-485 Option : GPIB, Ethernet										
Operational Temperature	0°C ~45°C										
Humidity	0~90% (Non condensing)										
Altitude	< 1,500m										
Dimensions (H x W x D)	945 x 600 x 850mm	1340 x 600 x 850mm	1545 x 800 x 860mm	1900 x 1150 x 1240mm							
	37.2 x 23.62 x 33.46inch	52.75 x 23.62 x 33.46inch	60.82 x 31.49 x 33.85inch	74.8 x 45.27 x 48.81inch							
Weight	230kg	280kg	320kg	450kg	580kg	670kg	710kg	980kg	1415kg		
	507.2lbs	617.4lbs	705.6lbs	992.3lbs	1279lbs	1477.4lbs	1565.6lbs	2161lbs	3120.1lbs		

*1 Please contact for other voltage specification.

*2 The rated input voltage is 220V/380V.

*3 Low : 90 - 140V or High 180 - 280V.

* all specifications are subject to change without notice.

SPECIFICATIONS**VPV + Series three-Phase Output (10kVA - 100kVA)**

Model	VPV-PLUS -33010	VPV-PLUS -33015	VPV-PLUS -33020	VPV-PLUS -33030	VPV-PLUS -33045	VPV-PLUS -33060	VPV-PLUS -33075	VPV-PLUS -33100	
INPUT									
Phase	3Ø / 4 Wire + G								
Voltage ^{*1}	220V/380V±15%								
Frequency	47 - 63Hz								
Max. Current ^{*2}	18.7A	28.1A	37.4A	56.1A	84.2A	112.2A	140.3A	209.7A	
Power Factor	≥ 0.9 (Max. Power)								
OUTPUT									
Power	VA	10kVA	15kVA	20kVA	30kVA	45kVA	60kVA	75kVA	100kVA
Phase	3Ø / 4 Wire + G								
Voltage Ranges	Low(V) High(V)	0V~150.0V (L-N) 0V~300.0V (L-N)							
Voltage Resolution	0.1V								
Voltage Accuracy	0.5% F.S.+4 counts								
Frequency Range	Standard :45-65Hz Option :45-500Hz								
Frequency Resolution	0.1Hz								
Frequency Accuracy	±0.02% F.S.								
Max. Current (RMS)	Low(A) High(A)	27.8A 13.9A	41.7A 20.8A	55.6A 27.8A	83.3A 41.7A	125A 62.5A	166.7A 83.3A	208.3A 104.2A	277.8A 138.9A
Line Regulation	< 0.5%								
Load Regulation	≤ 0.5% (Resistive Load)								
Total Harmonic Distortion(THD) ^{*3}	≤ 0.5% (Resistive Load)								
Response Time	≤ 1ms								
Crest Factor	≥ 3								
MEASUREMENT									
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	0.01Hz								
Frequency Accuracy	±0.02% F.S.								
Current Range (RMS)	0 - 27.8A	0 - 41.7A	0 - 55.6A	0 - 83.3A	0 - 125A	0 - 166.7A	0 - 208.3A	0 - 277.8A	
Current Resolution (RMS)	0.1A								
Current Accuracy (RMS)	0.5% F.S.+4 counts								
Power Range	0 - 10kW	0 - 15kW	0 - 20kW	0 - 30kW	0 - 45kW	0 - 60kW	0 - 75kW	0 - 100kW	
Power Resolution	0.1kW								
Power Accuracy	1% F.S.+6 counts								
GENERAL									
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)								
Soft Start	Setting : Rated Volt. / Rated Freq. / Start Volt. / Start Freq. / Delay Time / Ramp Time								
Three Phase Independent Adjustment	U-N/V-N/W-N, Adjustment 0-300V								
Protection	Input : Input N.F.B, Over Voltage, Under Voltage, Output : Over Voltage, Over Current, Reverse Current, Over Temperature and machine will display the error code and give a warning sound.								
Remote Interface	Standard :RS-232/RS-422/RS-485 Option :GPIB, Ethernet								
Operational Temperature	0°C ~45°C								
Humidity	0~90% (Non condensing)								
Altitude	< 1,500m								
Dimensions (H x W x D)	945 x 600 x 850mm	1340 x 600 x 850mm				1545 x 800 x 860mm	1900 x 1150 x 1240mm		
	37.2 x 23.62 x 33.46inch	52.75 x 23.62 x 33.46inch				60.82 x 31.49 x 33.85inch	74.8 x 45.27 x 48.81inch		
Weight	280kg 617.4lbs	305kg 672.5lbs	360kg 793.8lbs	400kg 882lbs	560kg 1234.8lbs	670kg 1477.35lbs	960kg 2116.8lbs	1170kg 2579.9lbs	

*1 Please contact for other voltage specification. *2 The rated input voltage is 220V/380V. *3 Low : 90 - 140V or High 180 - 280V.

* all specifications are subject to change without notice.

VPV + Series three-Phase Output (150kVA - 2000kVA)

Model	VPV-PLUS-33150	VPV-PLUS-33200	VPV-PLUS-33300	VPV-PLUS-33400	VPV-PLUS-33500	VPV-PLUS-33600	VPV-PLUS-33800	VPV-PLUS-331000	VPV-PLUS-331200	VPV-PLUS-331500	VPV-PLUS-332000	
INPUT												
Phase	3Ø / 4 Wire + G											
Voltage ¹	220V/380V±15%											
Frequency	47 - 63Hz											
Max. Current ²	314.6A	419.4A	629.1A	838.8A	1048.5A	1258.3A	1677.7A	2097.1A	2516.5A	3145.6A	4194.2A	
Power Factor	≥0.9 (Max. Power)											
OUTPUT												
Power	VA	150kVA	200kVA	300kVA	400kVA	500kVA	600kVA	800kVA	1000kVA	1200kVA	1500kVA	
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		Standard :45-65Hz Option :45-500Hz										
Frequency Resolution		0.1Hz										
Frequency Accuracy		±0.02% F.S.										
Max. Current (RMS)	Low(A)	416.7A	555.6A	833.3A	1111.1A	1388.9A	1666.7A	2222.2A	2777.8A	3333.3A	4166.7A	5555.6A
	High(A)	208.3A	277.8A	416.7A	555.6A	694.4A	833.3A	1111.1A	1388.9A	1666.7A	2083.3A	2777.8A
Line Regulation		< 0.5%										
Load Regulation		≤ 0.5% (Resistive Load)										
Total Harmonic Distortion(THD) ³		≤ 0.5% (Resistive Load)										
Response Time		≤ 1ms										
Crest Factor		≥3										
MEASUREMENT												
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		0.01Hz										
Frequency Accuracy		±0.02% F.S.										
Current Range(RMS)		0 - 416.7A	0 - 555.6A	0 - 833.3A	0 - 1111.1A	0 - 1388.9A	0 - 1666.7A	0 - 2222.2A	0 - 2777.8A	0 - 3333.3A	0 - 4166.7A	0 - 5555.6A
Current Resolution(RMS)		0.1A										
Current Accuracy(RMS)		0.5% F.S.+4 counts										
Power Range		0 - 150kW	0 - 200kW	0 - 300kW	0 - 400kW	0 - 500kW	0 - 600kW	0 - 800kW	0 - 1000kW	0 - 1200kW	0 - 1500kW	0 - 2000kW
Power Resolution		0.1kW										
Power Accuracy		1% F.S.+6 counts										
GENERAL												
Efficiency		≥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)										
Soft Start		Setting : Rated Volt. / Rated Freq. / Start Volt. / Start Freq. / Delay Time / Ramp Time										
Three Phase Independent Adjustment		U-N/V-N/W-N, Adjustment 0-300V										
Protection		Input : Input N.F.B, Over Voltage, Under Voltage, Output : Over Voltage, Over Current, Reverse Current, Over Temperature and machine will display the error code and give a warning sound.										
Remote Interface		Standard :RS-232/RS-422/RS-485 Option :GPIB, Ethernet										
Operational Temperature		0°C ~45°C										
Humidity		0~90% (Non condensing)										
Altitude		< 1,500m										
Dimensions (H x W x D) ⁴		1900 x 1150 x 1240 mm	2050 x 3881 x 1539mm			2050 x 4716 x 1520 mm	2050 x 6003 x 1520mm	2200 x 10827 x 1590mm			2200 x 12990x 1590mm	
		74.8 x 45.27 x 48.82 inch	80.7 x 152.8 x 60.6inch			80.7 x 152.7 x 59.8 inch	80.7 x 236.3 x 59.8inch	86.6 x 426.2 x 62.6 inch			86.61 x 511.4 x 62.5 inch	
Weight		1835kg	2415kg	3620kg	4670kg	5820kg	7720kg	9240kg	11080kg	16800kg	18270kg	19950kg
		4046lbs	5325lbs	7982lbs	10297lbs	12833lbs	17022lbs	20374lbs	24431lbs	37044lbs	40285lbs	43989.75lbs

*1 Please contact for other voltage specification. *2 The rated input voltage is 220V/380V. *3 Low : 90 - 140V or High 180 - 280V. *4 for * series over 400kVA, please contact us for details.

* all specifications are subject to change without notice.

ORDERING INFORMATION
Doc. IS-0019
VPV + Series Single-Phase Output (10kVA - 150kVA)

Model Number	Description
VPV-PLUS-31010	High Power Programmable AC Power Source (10kVA/300V/45-65Hz)
VPV-PLUS-31015	High Power Programmable AC Power Source (15kVA/300V/45-65Hz)
VPV-PLUS-31020	High Power Programmable AC Power Source (20kVA/300V/45-65Hz)
VPV-PLUS-31030	High Power Programmable AC Power Source (30kVA/300V/45-65Hz)
VPV-PLUS-31045	High Power Programmable AC Power Source (45kVA/300V/45-65Hz)
VPV-PLUS-31060	High Power Programmable AC Power Source (60kVA/300V/45-65Hz)
VPV-PLUS-31075	High Power Programmable AC Power Source (75kVA/300V/45-65Hz)
VPV-PLUS-31100	High Power Programmable AC Power Source (100kVA/300V/45-65Hz)
VPV-PLUS-31150	High Power Programmable AC Power Source (150kVA/300V/45-65Hz)
VPV-PLUS-001	Output Frequency 45Hz-500Hz
VPV-PLUS-002	GPIB Interface
VPV-PLUS-004	Ethernet Interface
VPV-PLUS-005	Remote Senseing

VPV + Series three-Phase Output (10kVA - 2000kVA)

Model Number	Description
VPV-PLUS-33010	High Power Programmable AC Power Source (10kVA/300V/45-65Hz)
VPV-PLUS-33015	High Power Programmable AC Power Source (15kVA/300V/45-65Hz)
VPV-PLUS-33020	High Power Programmable AC Power Source (20kVA/300V/45-65Hz)
VPV-PLUS-33030	High Power Programmable AC Power Source (30kVA/300V/45-65Hz)
VPV-PLUS-33045	High Power Programmable AC Power Source (45kVA/300V/45-65Hz)
VPV-PLUS-33060	High Power Programmable AC Power Source (60kVA/300V/45-65Hz)
VPV-PLUS-33075	High Power Programmable AC Power Source (75kVA/300V/45-65Hz)
VPV-PLUS-33100	High Power Programmable AC Power Source (100kVA/300V/45-65Hz)
VPV-PLUS-33150	High Power Programmable AC Power Source (150kVA/300V/45-65Hz)
VPV-PLUS-33200	High Power Programmable AC Power Source (200kVA/300V/45-65Hz)
VPV-PLUS-33300	High Power Programmable AC Power Source (300kVA/300V/45-65Hz)
VPV-PLUS-33400	High Power Programmable AC Power Source (400kVA/300V/45-65Hz)
VPV-PLUS-33500	High Power Programmable AC Power Source (500kVA/300V/45-65Hz)
VPV-PLUS-33600	High Power Programmable AC Power Source (600kVA/300V/45-65Hz)
VPV-PLUS-33800	High Power Programmable AC Power Source (800kVA/300V/45-65Hz)
VPV-PLUS-331000	High Power Programmable AC Power Source (1000kVA/300V/45-65Hz)
VPV-PLUS-331200	High Power Programmable AC Power Source (1200kVA/300V/45-65Hz)
VPV-PLUS-331500	High Power Programmable AC Power Source (1500kVA/300V/45-65Hz)
VPV-PLUS-332000	High Power Programmable AC Power Source (2000kVA/300V/45-65Hz)
VPV-PLUS-001	Output Frequency 45Hz-500Hz
VPV-PLUS-002	GPIB Interface
VPV-PLUS-003	Three Phase Angle Adjustment
VPV-PLUS-004	Ethernet Interface
VPV-PLUS-005	Remote Sensing