



Your Power House
VP ELECTRONIQUE

VPS series

Programmable Regenerative Grid Simulator
45~2000kVA

Built-in
Low Voltage Ride
Through Function
LVRT



▼ Load Regulation

$\leq 1\%$

▼ Low Distortion

$THD \leq 2\%$

▼ Regenerative Function

$PF \geq 0.99$

▼ High Efficiency
 $\geq 92\%$

▼ Complete Interface Options
RS232/RS485/LAN/USB/GPIB

▼ Built-in LVRT Mode

▼ Complete Programmable Function ▼ Three Phase Independent Control ▼ Intuitive Touch Screen HMI

VPS series

RS232

RS485

USB

LAN

GPIB

Programmable Regenerative Grid Simulator

VPS series is a programmable regenerative grid simulator, which convert fixed input voltage and input frequency into expected output voltage and output frequency. Its load regulation can be lower than 1%, which provide pure AC source for the equipment under test (EUT). PAS series not only can provides pure and stable sine wave AC source, but also has comprehensive protections for detecting over current, over load, over voltage and short circuit. When energy is reversed from EUT, PAS series can source and sink the energy back to the utility grid with low distortion and tight voltage regulation.

VPS series is designed for applications related to renewable energy. VPS series can be used to simulate standards and various grid conditions like voltage dips, variations and interruptions with built-in Low Voltage Ride Through (LVRT) mode for easy operation. VPS series is ideal for products related to renewable energy from design verification, quality assurance, ATE to mass production, such as PV inverter, wind-power converter, electric vehicle and smart-grid based test applications.

High Output Power

45-2000kVA

Excellent Stability & Low Distortion

Load Regulation $\leq 1\%$
THD $\leq 2\%$

Voltage Drop Simulation

Built-in LVRT Mode

High Efficiency

Efficiency $\geq 92\%$

Three Phase Independent Control

Independently Adjustable
Three-phase Voltage

Regenerative Function

PF ≥ 0.99
Sink 100% Reactive Power

Applications of VPS Series

■ Applications



Renewable Energy



Electric Vehicle



EMC Chamber



Laboratory



Electronics Test



PV Inverter Test



Key Features of VPS Series

Intuitive Touch Panel

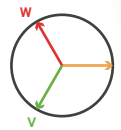
Touch Screen HMI



Users can quickly select parameters via 7" touch panel, which provides an easy operation and a clear measurement display.

Phase Angle Control (Optional)

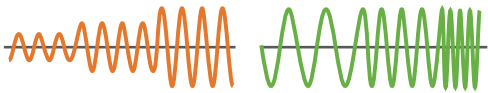
Angle between each phase can be set in Low Voltage Ride Through (LVRT) mode. Phase angle control is an optional feature.



- Phase Angle Control
- Angle between U and V
- Angle between U and W

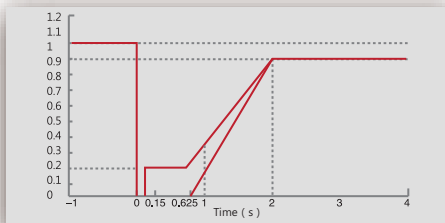
Complete Simulation Modes

Step Change Mode

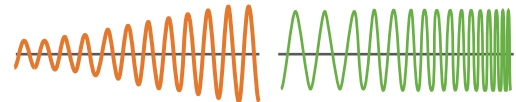


Step Change Mode: up to 24 sets are available for output voltage and output frequency configuration. Output voltage, output frequency and running time of each set can be set and stored separately.

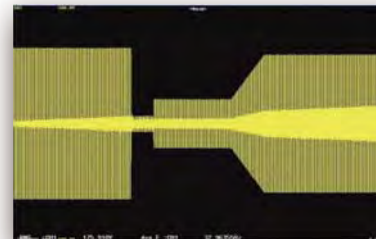
Low Voltage Ride Through (LVRT) Mode



Gradual Change Mode

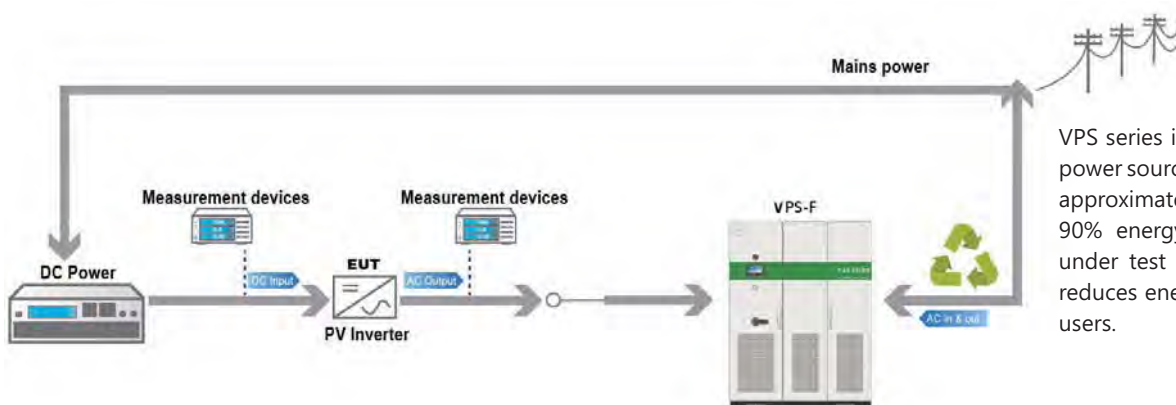


Gradual Change Mode: up to 12 sets are available for output voltage and output frequency configuration. Starting/ending voltage, starting/ending frequency and running time of each set can be set, and output will be automatically changed according to default slope.



Built-in Low Voltage Ride Through (LVRT) mode can simulate the grid in abnormal conditions. The settings include voltage, frequency, drop voltage, recovery voltage, rise time and hold time to simulate various conditions.

Regenerative Function



VPS series is a four-quadrant AC power source, which is capable to approximately source and sink 90% energy to the equipment under test (EUT). It significantly reduces energy consumption for users.

Specifications

VPS series	VPS-F-33045	VPS-F-33060	VPS-F-33075	VPS-F-33100	VPS-F-33120	VPS-F-33150	VPS-F-33200
Capacity (kVA)	45	60	75	100	120	150	200
Circuit Type	IGBT Type						
AC Input							
Phase	Three Phase						
Voltage	220V/380V						
Voltage Range	±15%						
Frequency Range	47~63Hz						
Power Factor	0.99						
ITHD	≤5%(Typical Value)						
AC Output							
Phase	Three Phase						
Voltage Range	0V ~ 300.0V (L-N)						
Output Current	62.5	83.3	104.2	138.9	166.7	208.3	277.9
Frequency Range	45~65Hz						
Frequency Stability	<0.01%						
Performance							
Line Regulation	<1% (Resistive Load)						
Load Regulation	<1% (Resistive Load)						
Output THD	<2% (Resistive Load)						
Efficiency	≥92%						
Response Time	<2ms						
Crest Factor	3:1						
Regenerative Function	Yes						
Display							
Type	7" Touch Panel						
Voltage	0.2V+0.1%FS; Resolution: 0.1V						
Current	0.2A+0.1%FS; Resolution: 0.1A						
Frequency	0.01Hz+0.01%FS; Resolution: 0.01Hz						
Real Power	0.2kW+0.1%FS; Resolution: 0.1kW						
Apparent Power	0.2kVA+0.1%FS; Resolution: 0.1kVA						
Power Factor	±0.01; Resolution: 0.01						
Communication Interface	RS485(or RS232); GPIB,LAN,USB(optional)						
Environment							
Isolation Resistance	>DC500V 10MΩ						
Isolation Voltage	AC 2000V 10mA/ 1min						
Cooling Method	Fan						
Working Temperature	0 °C to 45 °C						
Humidity	0~95%(Non-condense)						
Altitude	<1500m						
Dimension(W*D*H: mm)	1200 x 800 x 2100			1600 x 800 x 2100			

* All specifications are subject to change without notice.

* Consult factory for power levels exceed 200kVA

