

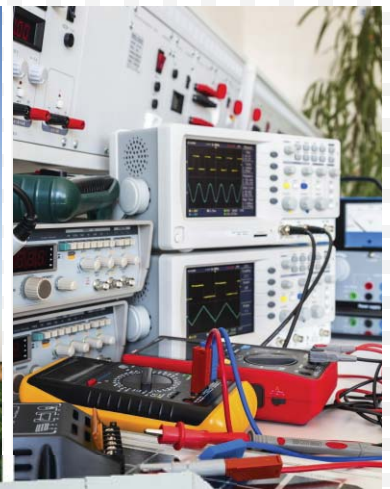


PAS Series

Programmable Grid Simulator Regenerative AC Power Source

45~2000kVA

Leading Test & Measurement Power Supply Provider



ISO 9001:2008



AC POWER CORP.

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PAS Series Product Features

1. Touch Screen HMI

User friendly HMI, easy to operate, rich colors, able to simulate change curve, suitable for non-harsh environment such as laboratory and R&D center

2. High Efficiency

Power Efficiency 92%, energy saving and eco-friendly

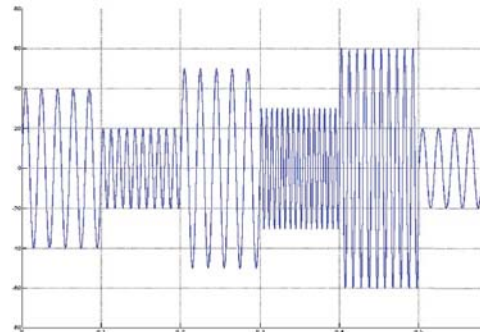
3. Programmable output voltage and frequency functionality generic mode, step change mode, gradual change mode and LVRT Test mode

- ① Generic mode: one set of output voltage and output frequency
- ② Step Change Mode: up to 24 sets of output voltage and frequency are available for configuration. Each voltage, frequency and running time (min. 1sec) can be set separately.
- ③ Gradual Change Mode: up to 12 sets of output voltage and frequency are available for configuration. Each set includes starting voltage, starting frequency and ending voltage, ending frequency and running time.
- ④ Low Voltage Ride Through Test (LVRT) Mode: Embedded Low Voltage Ride Through Test (LVRT) to simulate the grid during a fault clearing time. The settings includes nominal voltage, frequency (res: 0.01Hz), drop voltage, recovery voltage, rise time / hold time (res: 1ms).



Voltage and Frequency Setting Interface at Step Change Mode

Step Change Mode

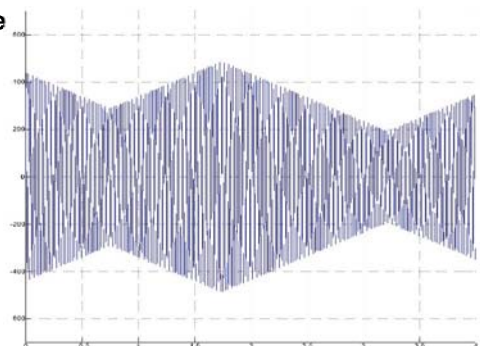


Voltage and Frequency Change Schematic Diagram



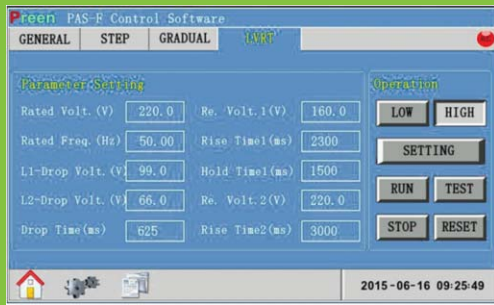
Voltage and Frequency Setting Interface at Gradual Change Mode

Gradual Change Mode

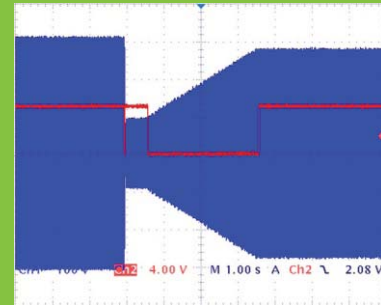


Voltage and Frequency Change Schematic Diagram

Low Voltage Ride Through Test (LVRT) Mode



Low Voltage Ride Through Test Mode (LVRT)



Grid Simulation Voltage Drop Schematic Diagram

PAS Series Product Features

4. Multiple supported communication interface

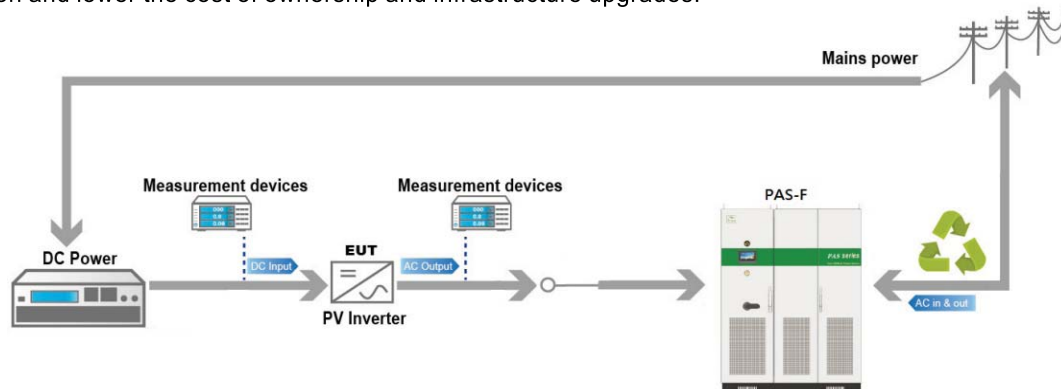
- ① RS232, GPIB, LAN or USB are available: SCPI command
- ② RS485 is available: MODBUS RTU command

5. Enhanced troubleshooting function

- ① Fault code is shown in the screen in the event of fault; to enable quick troubleshooting and reduce downtime and therefore enhance uptime
- ② Fault code and message in the PAS unit can be replicated into USB memory stick for further survey

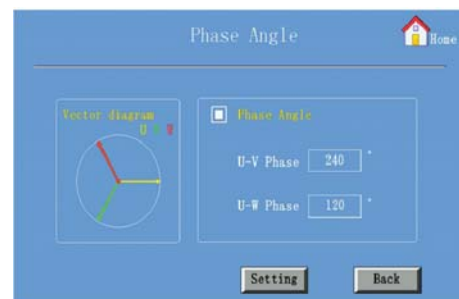
6. Regenerative Power to the Utility Grid

The PAS combines utility grid simulation and regenerative bi-directional AC source that is capable to both source and sink full current from the unit under test (EUT) with 90% of the power back to the utility grid. It saves the energy consumption and lower the cost of ownership and infrastructure upgrades.



7. Independently adjustable three-phase output / Phase angle adjustment (Optional)

- ① Three-phase output voltage (and frequency) is independently adjustable
- ② Work as one unit of three-phase power source or as three units of Single-phase power source
- ③ Adjustable phase angle between three phases.





PAS Series Product Features

8. Suitable for New Energy Compliance Test

PAS is a reference AC Source for use in UL1741, IEEE 157, BDEW and CEI0-16 type compliance test

9. Eco-friendly and high-efficiency design

- Power module technology: used to make size smaller and power density higher
- Regenerates up to 90% of energy to the grid
- Sinks 100% reactive power (kVAR)
- Voltage and frequency transient generation
- Low output distortion (THD)



Application



Photovoltaics



Wind Power



Electric Vehicle



Motor Test



EV Charger



EV Charging Station



Smart Grid



PV Inverter Test



Micro Grid



Lab



Auto-Test System



Automotive Electronics

PAS-F-

PAS Series
Frequency Converter

3
Input Phase
3

3
Output Phase
3

060
Capacity
60kVA

[Please contact us for other voltage specification]

PAS series Three Phase–Three Phase(45~200kVA)

Model	PAS-F-33045	PAS-F-33060	PAS-F-33075	PAS-F-33100	PAS-F-33120	PAS-F-33150	PAS-F-33200
Capacity(kVA)	45	60	75	100	120	150	200
Circuit Type	IGBT/PWM Type						
Input	Phase	Three Phase					
	Voltage	220V / 380V (or 120V / 208V, 277V / 480V) ①					
	Voltage range	±15%					
	Frequency	47~63Hz					
	Power Factor	0.99					
	iTHD	≅5%					
	Input Current	76.5	102.0	127.5	170.1	204.1	255.1
Output	Phase	Three Phase					
	Waveform	Pure Sine Waveform					
	Voltage Range	0V ~ 300.0V (L-N)					
	Frequency range	45~65Hz (Optional 40~70Hz)					
	Frequency Stability	<0.01%					
	Max. Current(A)	62.5	83.3	104.2	138.9	166.7	208.3
Performance	Line regulation	<1% (linear load)					
	Load regulation	<0.5% (linear load)					
	Output THD	<1% (linear load)					
	Efficiency	≅92%					
	Response time	<2ms					
	Crest Factor	3 : 1					
Protection	Input no-fuse breaker, Output Over/Low Voltage, Over Current, Over Load, Over Temperature, Short Circuit, Input Over/Low Voltage and Alarm System						
Regenerative Function to Grid Line	Current Harmonic Distortion	≅5%					
	Power Factor	0.99					
	Regenerative Efficiency	≅90%					
Display	Type	7" Touch Panel Screen					
	Voltage	Accuracy: 0.2V+0.1%FS; Resolution: 0.1V					
	Current	Accuracy: 0.2A+0.1%FS; Resolution: 0.1A					
	Frequency	Accuracy: 0.01Hz+0.01%FS; Resolution: 0.01Hz					
	Real Power (kW)	Accuracy: 0.2kW+0.1%FS; Resolution: 0.1kW					
	Reactive Power (kVA)	Accuracy: 0.2kVA+0.1%FS; Resolution: 0.1kVA					
	Input Power Factor	Accuracy: +/-0.01; Resolution: 0.01					
Communication	Rs485 (Rs232)	Standard					
	Ethernet, GPIB, USB	Option					
Environment	Isolation Resistance	>DC500V 10MΩ					
	Isolation Voltage	AC 1800V 10mA / 1min					
	Cooling Method	Fan					
	Working Temperature	0°C to 45°C					
	Humidity	0~95%(Non-Condense)					
Altitude	<1500m						
Dimension (mm)	1200×800×2100				1600×800×2100		

P.S.: ① Please contact us for other voltage specification.
 ② In the interest of continuous development, we reserve the right to alter designs and specifications without prior notice.
 ③ Consult factory for power levels exceed 200kVA

AC Power Corp. offers products widely applied in multi-professional fields and provides the best power solutions to customers. Our mission is to satisfy customers' demand by considering the whole conditions including power environment, loading allocation, module solution alternative, thoughtful design, lean and efficient manufacturing, timely and comprehensive maintenance.

Leading Test & Measurement Power Supply Provider



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