

AFV-S series

Programmable AC Power Source

preliminary

Preen®

only
2U/4U



Intuitive Touch Screen HMI



CE RoHS
Compliant

▼ Output Voltage

0-310V

▼ Output Frequency

40-500Hz

▼ Remote Interface

RS-232 / RS-485 / Ethernet /
Analog / PLC Remote / USB

▼ Compact & High Power Density

with only 2U for 2.5kVA

▼ Shortcuts of Output Memory Set

20 memory sets & 4 shortcuts

Programmable AC Power Source

Preen's AFV-S series is a programmable AC power source with precise measurement capability. This compact product comes in four output power levels: 600VA, 1250VA, 2500VA and 5000VA, which provides clean power with low harmonic distortion.

The AFV-S series can display 4 shortcuts of 20 memory sets, and the voltage and frequency setting of each memory sets can be clearly read. Users can quickly set and view the parameters via 5 inches touch panel or rotary knob, which provides an easy operation and measurement display.

The AFV-S series is equipped with communication interfaces of RS232, RS485, Ethernet(opt.), Analog(opt.), and USB(opt.). Its complete remote interfaces and specialized control software offer an easy programming manner to remotely control the product. It is ideal for home appliances, power connector, LED lighting, automation testing in manufacturing and product testing in laboratory.

• Compact & High Power Density

2U/4U

2U: 600VA / 1250VA / 2500VA
4U: 5000VA

• Ideal for Inrush Current Applications

4
peak/rms

Capable of delivering up to **4 times** of peak current from RMS current

• Low Distortion (THD)

≤0.3%

Less than **0.3%** when output frequency is lower than **100Hz**.

• Output Voltage & Frequency

0-310V

40-500Hz

• 20 Memory Sets & 4 Shortcuts

20 memory sets

4 shortcuts for quickly switching the output.

• Remote Interface

Standard

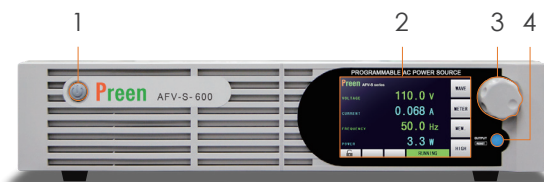
Optional

RS-232
RS-485

Ethernet/
USB/Analog

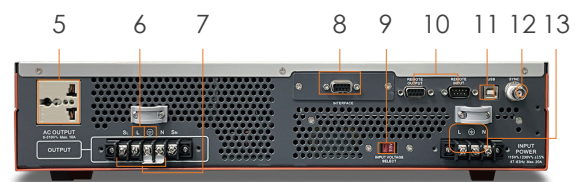
PANEL DESCRIPTION

Front Panel



- | | |
|---------------------|---------------------------|
| 1. Power Switch | 6. Output Terminals |
| 2. Touch Screen HMI | 7. Remote Sense |
| 3. Rotary Knob | 8. RS-232/RS-485 |
| 4. Output / Reset | 9. Input Voltage Selector |
| 5. AC Output Socket | 10. PLC Remote In/Out |

Back Panel



- | |
|--|
| 11. USB Interface(for firmware update) |
| 12. Sync. Signal I/O |
| 13. Input Socket* |

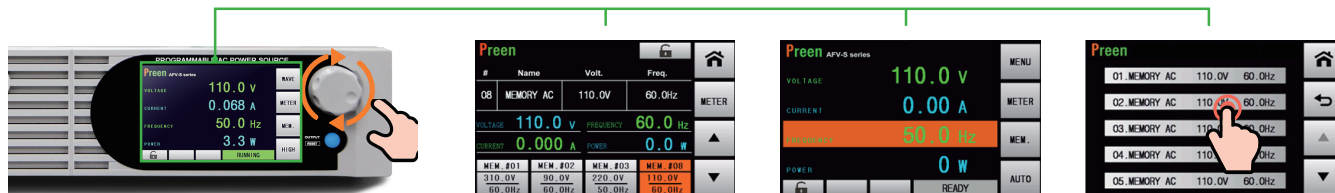
*AFV-S-1250, AFV-S-2500, AFV-S-5000 have input terminals.

ORDERING INFORMATION

Model Number	Description
AFV-S-600 (40- 500Hz)	Programmable AC Power Source
AFV-S-1250 (40- 500Hz)	Programmable AC Power Source
AFV-S-2500 (40- 500Hz)	Programmable AC Power Source
AFV-S-5000 (40- 500Hz)	Programmable AC Power Source

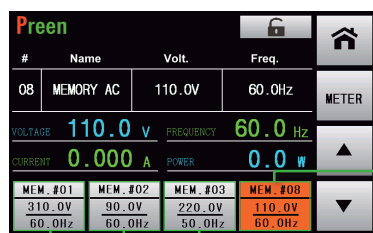
Model Number	Description
AFV-S-002	RS-232/RS-485/USB/Ethernet Interface
AFV-S-003	Analog Control Interface
AFV-S-010	Input Power Cable 3M (for 1.25kVA/2.5kVA)
AFV-S-011	Input Power Cable 5M (for 5kVA)

Intuitive Touch Screen Control



To create a complex sequence on the HMI is no longer a difficult task for AFV-S series. The 5 inches touch screen provides users a clear display and an easy set up. AFV-S is also equipped with a rotary knob for better fine tune adjustments.

4 Shortcuts of Memory Sets



- 1 One user-assigned shortcut from 20 memory sets
- 2 Three fixed shortcut from first three memory sets

AFV-S series can display 4 shortcuts of memory sets, and the voltage and frequency setting of each memory sets can be clearly read. The user can quickly switch the output by selecting the shortcuts. Also, the Screen Lock function is also provided for preventing operators from accidentally changing shortcuts during output and causing DUT damage.

20 Memory Sets



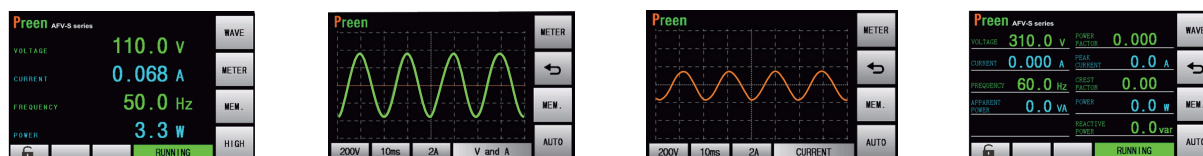
The AFV-S series have 20 memory sets. It can display 5 memory sets and voltage, frequency settings at the same time. In addition, users can define the name for great convenience.

Shortcuts of Voltage and Frequency



Users can quickly set the parameters via 5 inches touch panel or rotary knob, which provides an easy operation and measurement display.

Waveform Display & Comprehensive Measurement



AFV-S series is capable of providing output waveform display and precise measurements, user can easily check the measurements of RMS voltage, output frequency, RMS current, true power, apparent power, reactive power, power factor and crest factor according to the product output. Additionally, all measurements can be exported as a report via the control software for analyzing and tracking EUT performance.

Remote Interface



For easy setup and programming, the AFV-S series has standard RS-232/RS-485/PLC Remote interface. User also can select optional Ethernet /Analog/USB interfaces for different remote control requirements.

SPECIFICATIONS

Model		AFV-S-600		AFV-S-1250		AFV-S-2500		AFV-S-5000		
INPUT										
Phase		Single								
Voltage		98-132Vac/196-264Vac				196-264Vac				
Frequency		47~63Hz								
Max. Current		10A		20A		20A		40A		
OUTPUT										
Power		(VA)	600VA		1250VA		2500VA		5000VA	
		(W)	500W		1000W		2000W		4000W	
Phase		1Ø / 2 Wire + G								
Voltage Ranges		0-155Vrms/0-310Vrms								
Voltage Accuracy		±(1% of Setting + 0.1% F.S.)								
Voltage Resolution		0.1Vrms								
Frequency		40-500Hz								
Frequency Accuracy		0.1Hz								
Frequency Resolution		±0.02%								
Max. Current (RMS)		5A/2.5A		10A/5A		20A/10A		40A/20A		
Max. Current (Peak)		20A/10A		40A/20A		80A/40A		160A/80A		
Total Harmonic Distortion (THD)		≤ 0.5% (Resistive Load) ≤ 0.3% at 110V/220V, 50Hz, 60Hz.								
Line Regulation		±0.1V								
Load Regulation		≤ 0.07% F.S (Resistive Load)								
Response Time		≤ 300µs								
Crest Factor		≥ 3								
Inrush Current		≤ 4 time of max. output current (R.M.S)								
MEASUREMENT										
Voltage Range		0-420V								
Voltage Accuracy		±(0.2% of Reading + 5 Counts)								
Voltage Resolution		0.1V								
Frequency Range		40.0-500.0Hz								
Frequency Accuracy		±0.1Hz								
Frequency Resolution		0.1Hz								
Current Range (RMS)		Hi: 1-12A/L0: 0.005-1.2A				Hi: 2-24A/ Lo: 0.005-2.4A		Hi: 0.05-48A		
Current Accuracy (RMS)		± (1% of Reading + 5 Counts), at 40-500Hz *2								
Current Resolution (RMS)		Hi: 0.01A/L0: 0.001A						Hi: 0.01A		
Peak Current Range		0-45A				0-90A		0-180A		
Peak Current Accuracy		±(1% of Reading + 10 Counts), at PF > 0.2								
Peak Current Resolution		0.1A								
Power Range		Hi: 100-1200W/ Lo: 0-120W				Hi: 200-2400W/ Lo: 0-240W		Hi: 0-4800W		
Power Accuracy		±(2% of Reading + 10 Counts), at 40-500Hz								
Power Resolution		Hi: 1W/L0: 0.1W						Hi: 1W		
GENERAL										
Efficiency		≥ 77% at Max. Power		≥ 80% at Max. Power						
Protection		OVP, LVP, OCP, OPP, OTP, RCP, Fan Fail and AMP Fail								
Remote Interface		Standard : RS-232/RS-485/PLC Remote IN & OUT Optional : Analog/Ethernet/USB								
Over Current Foldback		Over Current Foldback								
Output Sync Signal		ON Mode (5V DC Signal) or EVENT Mode (5V DC Pulse Signal)								
Memories		20 Memories								
Operating Temperature		0-40°C								
Dimensions (HxWxD)		89×442×495				89×442×650		176×442×665		
Weight		approx.16kg / 35.3lbs		approx.20kg / 44.1lbs		approx. 31.3kg / 69lbs		approx. 61.5kg / 135lbs		

* 1 All specifications are subject to change without notice. * 2 AFV-S-2500 is ± (1% F.S.+ 5 counts).



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