General purpose Bench top AC power sources

- Low THD
- Portable Power, Low Cost.
- 810 VA to 1250 VA Output Power
- Simple Front Panel Operation
- 16 Hz to 500 Hz Frequency Range
- High Peak Current Capability
- Remote Control Option



800VA-1250VA

135–270 V

6–9.2 A



Compact AC Power

With European and US outlet sockets to connect the load, the 801P, 1001P and 1251P portable programmable AC power sources are ideal for a wide variety of applications.

Universal input allows use anywhere in the world to provide a convenient source of variable utility power for the testing and evaluation of domestic and commercial equipment. All common line voltage and frequency combinations are covered.

In addition, the frequency range covers 500 Hz, making these products ideal for commercial and defense avionics applications. The current measurement function eliminates the need for an external current shunt or transformer. Load current of the UUT (Unit Under Test) can be read directly on the large LCD display to 0.1 A. For additional protection, a current limit function can be set from zero to the maximum current available.

High peak current capability of more than three times the RMS current allows the P Series to drive non-linear loads.

Easy To Use Controls

Front panel digital rotary encoders are used to set voltage and frequency. These controls have an analog feel, with the precision and reliability of digital circuits. Settings are read directly on the large high contrast LCD displays.

All models offer two output voltage ranges, 135 VRMS L-N and 270 VRMS L-N, maximizing the current at the required voltage.

The output frequency can be varied from 16 Hz up to 500 Hz to cover both avionics and utility power applications.

Product Evaluation and Test Applications

Traditional Variac tests can be automated using the P Series AC sources. With digital voltage readout, and measurement of load current, several items of equipment can be eliminated from 'first time power up' tests. All functions are contained in a single convenient and easily portable package, which can be most useful in production and on-site applications.

Avionics Applications

As affordable and reliable sources of 400 Hz AC power, the 801P, 1001P and 1251P are well suited for commercial and defense avionics applications.

Remote Control

Equipped with the optional RS232C serial interface, these units are easily integrated into an ATE system. A Windows ™ Graphical User Interface (GUI) program is included for PC control applications.

Low Cost Of Ownership

Careful design, the use of modular construction and quality components, all contribute to provide many years of uninterrupted service. The modular construction allows components or subassemblies to be replaced quickly to minimize downtime.

AMETEK Programmable Power 9250 Brown Deer Road San Diego, CA 92121-2267



USA

P Series : Product Specifications

Output			
Model	801P	1001P	1251P
AC Power	810 VA	1000 VA	1250 VA
Voltage			
Range Low	0-135 V(L-N)	0-135 V(L-N)	0-135 V(L-N)
Range High	0-270 V(L-N)	0-270 V(L-N)	0-270 V(L-N)
Accuracy @ 50/60 Hz	± 1 % FS	± 1 % FS	± 1 % FS
Accuracy @ 400 Hz	± 2 % FS	± 2 % FS	± 2 % FS
Resolution	0.1 V	0.1 V	0.1 V
Line & Load Regulation lo range	± 1 % FS	± 1 % FS	± 1 % FS
Line & Load Regulation hi range	$\pm \ 0.5$ % FS	\pm 0.5 % FS	\pm 0.5 % FS
Total Harmonic Distortion @ 50/60 Hz	< 0.55 % typical	< 0.55 % typical	< 0.55 % typical
Output Noise	< 0.1 V typical	< 0.1 V typical	< 0.1 V typical
Frequency (specifications valid from 45 Hz to	500 Hz)		
Range	16 - 500 Hz	16 - 500 Hz	16 - 500 Hz
Accuracy	± 0.02 %	± 0.02 %	$\pm \ 0.02$ %
Resolution below 100 Hz	0.1 Hz	0.1 Hz	0.1 Hz
Resolution above 100 Hz	1 Hz	1 Hz	1 Hz
Current			
Current - Steady State lo range	6.0 ARMS	7.4 ARMS	9.2 ARMS
Current - Steady State hi range	3.0 ARMS	3.7 ARMS	4.6 ARMS
Peak Current lo range	17.8 A	22.2 A	27.6 A
Peak Current hi range	8.9 A	11.1 A	13.8 A
Input			
Line Voltage 2 wire + GND	100 - 240 ±10 % VRMS	100 - 240 ±10 % VRMS	100 - 240 ± 10 % VRMS
Line Voltage 2 wire + GND Input Current	100 - 240 ±10 % VRMS <15 ARMS	100 - 240 ±10 % VRMS <15 ARMS	100 - 240 ±10 % VRMS <20 ARMS
-			
Input Current	<15 ARMS	<15 ARMS	<20 ARMS
Input Current Line Frequency	<15 ARMS 47 - 63 Hz	<15 ARMS 47 - 63 Hz	<20 ARMS 47 - 63 Hz
Input Current Line Frequency Holdup Time	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms	<20 ARMS 47 - 63 Hz 20 ms
Input Current Input Current Line Frequency Input Current Holdup Time Input Current Power Factor Input Current	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms	<20 ARMS 47 - 63 Hz 20 ms
Input Current Line Frequency Holdup Time Power Factor Controller	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms > 0.95 typical	<20 ARMS 47 - 63 Hz 20 ms
Input Current Line Frequency Power Factor Controller Type	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms > 0.95 typical Programmable	<20 ARMS 47 - 63 Hz 20 ms
Input Current Input Current Line Frequency Input Current Holdup Time Input Current Power Factor Input Current Controller Input Current Controls Input Current	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms > 0.95 typical Programmable Digital Encoders	<20 ARMS 47 - 63 Hz 20 ms
Input Current Input Current Line Frequency Input Current Holdup Time Input Current Power Factor Input Current Controller Input Current Type Input Current Controls Readout Voltage	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms > 0.95 typical Programmable Digital Encoders 4 digit LCD	<20 ARMS 47 - 63 Hz 20 ms
Input Current Line Frequency Holdup Time Power Factor Controller Type Controls Readout Voltage Readout Freqency and Current	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms > 0.95 typical Programmable Digital Encoders 4 digit LCD 4 digit LCD	<20 ARMS 47 - 63 Hz 20 ms
Input CurrentLine FrequencyHoldup TimePower FactorControllerTypeControlsReadout VoltageReadout Freqency and CurrentNon Volatile Setups (with Option -232)	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms > 0.95 typical Programmable Digital Encoders 4 digit LCD 4 digit LCD	<20 ARMS 47 - 63 Hz 20 ms
Input Current Input Current Line Frequency Holdup Time Power Factor Controller Type Controls Readout Voltage Readout Voltage Readout Freqency and Current Non Volatile Setups (with Option -232) Protection Input Current	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS	<20 ARMS 47 - 63 Hz 20 ms
Input Current Input Current Line Frequency Input Current Holdup Time Power Factor Power Factor Input Current Controller Input Current Type Input Current Readout Voltage Input Current Non Volatile Setups (with Option -232) Input Current Imit Mode	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms 20 ms > 0.95 typical Programmable Digital Encoders 4 digit LCD 4 digit LCD 8 Programmable (Reduces output voltage)	<20 ARMS 47 - 63 Hz 20 ms
Input CurrentLine FrequencyHoldup TimePower FactorControllerTypeControlsReadout VoltageReadout Freqency and CurrentNon Volatile Setups (with Option -232)ProtectionCurrent limit ModeCurrent limit Resolution	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms > 0.95 typical Programmable Digital Encoders 4 digit LCD 4 digit LCD 8 Programmable (Reduces output voltage) 0.1 ARMS	<20 ARMS 47 - 63 Hz 20 ms
Input Current I Line Frequency I Holdup Time I Power Factor I Controller I Type I Controls I Readout Voltage I Non Volatile Setups (with Option -232) I Protection I Current limit Mode I Over Temperature I	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms 20 ms > 0.95 typical Programmable Digital Encoders 4 digit LCD 4 digit LCD 8 Programmable (Reduces output voltage) 0.1 ARMS yes	<20 ARMS 47 - 63 Hz 20 ms
Input CurrentLine FrequencyHoldup TimePower FactorControllerTypeControlsReadout VoltageReadout Freqency and CurrentNon Volatile Setups (with Option -232)ProtectionCurrent limit ModeCurrent limit ResolutionOver TemperatureOver Voltage	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms 20 ms > 0.95 typical Programmable Digital Encoders 4 digit LCD 4 digit LCD 8 Programmable (Reduces output voltage) 0.1 ARMS yes	<20 ARMS 47 - 63 Hz 20 ms
Input CurrentLine FrequencyHoldup TimePower FactorControllerTypeControlsReadout VoltageReadout Freqency and CurrentNon Volatile Setups (with Option -232)ProtectionCurrent limit ModeCurrent limit ResolutionOver TemperatureOver VoltageReasurements	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms 20 ms > 0.95 typical Programmable Digital Encoders 4 digit LCD 4 digit LCD 8 Programmable (Reduces output voltage) 0.1 ARMS yes yes	<20 ARMS 47 - 63 Hz 20 ms
Input Current I Line Frequency I Holdup Time I Power Factor I Controller I Type I Controls I Readout Voltage I Non Volatile Setups (with Option -232) I Protection I Current limit Mode I Over Temperature I Over Voltage I Measurements I Current Range I	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms 20 ms > 0.95 typical Programmable Digital Encoders 4 digit LCD 4 digit LCD 8 Programmable (Reduces output voltage) 0.1 ARMS yes yes 0.0 - 10.0 ARMS	<20 ARMS 47 - 63 Hz 20 ms
Input Current I Line Frequency I Holdup Time I Power Factor I Controller I Type I Controls I Readout Voltage I Non Volatile Setups (with Option -232) I Protection I Current limit Mode I Over Voltage I Over Voltage I Over Voltage I Current Range I Current Accuracy I	<15 ARMS 47 - 63 Hz 20 ms	<15 ARMS 47 - 63 Hz 20 ms 20 ms 30.95 typical Programmable Digital Encoders 4 digit LCD 4 digit LCD 4 digit LCD 8 Programmable (Reduces output voltage) 0.1 ARMS yes yes yes 0.0 - 10.0 ARMS ± 0.2 ARMS	<20 ARMS 47 - 63 Hz 20 ms

P Series : Product Specifications

800VA-1250VA

Remote Control Option -232	
Interface type	RS232C
Baud rate	9600
Command Language	SCPI
Physical	
Dimensions inches HxWxD	8.25 x 8.5 x 17.5
Dimensions mm HxWxD	210 x 216 x 445
Weight	30 lbs / 13.6 kg
Operating Temp.	0 - 40 ° C
* Specifications are warranted over an	ambient temperature range of 0 to 10 °C and apply after a 30 minute warmun period

* Specifications are warranted over an ambient temperature range of 0 to 40 °C and apply after a 30 minute warmup period.

Options					
-232	Optional RS232C Interface. Includes Windows™ Graphical User Inter	Optional RS232C Interface. Includes Windows™ Graphical User Interface software and serial cable			
-ISS	International Socket Strip				
-ISR	Rackmounted ISS				
Line Cord Options					
Country	801P/1001P	1251P			
Europe	PC11	PC11			
Australia / New Zealand	PC12	PC12			
UK / Ireland	PC13	PC13			
Denmark	PC14	PC14			
India	PC15	PC15			
Israel	PC16	PC16			
Italy	PC17	PC17			
North America*	PC21	PC18			
Switzerland	PC19	PC19			
Japan	PC20	PC20			
* Specifications are warranted over an ambient temperature range of 0 to 40 °C and apply after a 30 minute warmup period.					
Supplied with					

North American Line Power Cord

USA and European line output mating connector

Instruction Manual

© 2009 AMETEK Programmable Power All rights reserved. AMETEK Programmable Power is the trademark of AMETEK Inc., registered in the U.S. and other countries. Elgar, Sorensen, California Instruments, and Power Ten are trademarks of AMETEK Inc., registered in the U.S.

Notes	