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



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	± 0.5 % FS	± 0.5 % FS	± 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 %	± 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	
Input Current	<15 ARMS	<15 ARMS	<20 ARMS	
Line Frequency	47 - 63 Hz	47 - 63 Hz	47 - 63 Hz	
Holdup Time	20 ms	20 ms	20 ms	
Power Factor	> 0.95 typical	> 0.95 typical	> 0.95 typical	
Controller				
Туре	Programmable			
Controls	Digital Encoders			
Readout Voltage	4 digit LCD			
Readout Freqency and Current	4 digit LCD			
Non Volatile Setups (with Option -232)	8			
Protection				
Current limit Mode	Programmable (Reduces output voltage)			
Current limit Resolution	0.1 ARMS			
Over Temperature	yes			
Over Voltage	yes			
Measurements				
Current Range	0.0 - 10.0 ARMS			
Current Accuracy	± 0.2 ARMS			
Current Resolution	0.1 A			
Voltage Range	0 - 278 V			
Voltage Resolution (requires Option -232)	1 (below 250 V) V			
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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 40 °C and apply after a 30 minute warmup period				

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Options				
-232	Optional RS232C Interface. Includes Windows™ Graphical User Interface	Optional RS232C Interface. Includes Windows™ Graphical User Interface software and serial cable		
-ISS	International Socket Strip			
-ISR	Rackmounted ISS	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

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Notes	