



6005 - 500 VA

6010 - 1 KVA

6020 - 2 KVA

6040 - 4 KVA

6000 Series **Automated AC Power Sources**

Features

- Graphic Liquid Crystal Display
- Encoder wheel to adjust voltage and frequency during a test
- Test/reset key to activate and disable output
- Universal receptacle to handle multiple country configurations
- RS-232 Standard, Ethernet & GPIB Optional
- 50 memories with 9 steps per memory
- PLC output for Pass/Fail/Test-in-Process
- Prompt feature to add instructions to a test
- Over current fold back
- Front panel lockout
- Enhanced protection circuits
- Fully programmable parameters high/low limits for voltage, current and frequency
- Programmable test time, delay time, and ramp timers
- Programmable surge/drop voltage, start/end angle
- Optional DC output voltage to provide either an AC or DC power source

Specifications

Input

Phase	1 Ø
Voltage	6005/6010 115/230 Vac ± 10%
	6020/6040 208 Vac ± 10% OPTION: 230 Vac ± 10%
Frequency	47 - 500 Hz

Output

Power Rating	6005	500 VA
	6010	1000 VA
	6020	2000 VA
	6040	4000 VA
Max. Current (RMS)	6005	0 - 150 V: 4.6 A at < 110 V
		0 - 300 V: 2.3 A at < 220 V
	6010	0 - 150 V: 9.2 A at < 110 V
		0 - 300 V: 4.6 A at < 220 V
6020	0 - 150 V: 18.4 A at < 110 V	
	0 - 300 V: 9.2 A at < 220 V	
6040	0 - 150 V: 36.8 A at < 110 V	
	0 - 300 V: 18.4 A at < 220 V	
Frequency	Range: 40.0 - 500 Hz	
Phase	1 Ø/2 W	
Total Harmonic Distortion (T.H.D)	< 1% (Resistive Load)	
Crest Factor	≥ 3	
Line Regulation	± 0.1 V	
Load Regulation	± (0.5% of output +0.5 V) at Resistive Load	
Response Time	< 400 µ/sec	
Voltage	0 - 300 V	

Measurement

Voltage	6005/6010	Range: 0.0 - 400.0 V
		Resolution: 0.1 V
		Accuracy: ± (1% of reading +2 counts)
6020	Range: 0.0 - 400.0 V	
	Resolution: 0.1 V	
	Accuracy: ± (1% of reading +2 counts) > 5 V	
6040	Range: 0.0 - 400.0 V	
	Resolution: 0.1 V	
	Accuracy: ± (1% of reading +5 counts) > 5 V	
Frequency	Range: 0.0 - 500.0 Hz	
	Resolution: 0.1 Hz	
	Accuracy: ± 0.1 Hz	

Measurement *(continued)*

Current (RMS)	6005	Range: 0.005 - 6.50 A
		Resolution: Low Range: 0.001 A
		High Range: 0.01 A
		Accuracy: ± (1% of reading +5 counts)
6010	Range: 0.005 - 13.00 A	
	Resolution: Low Range: 0.001 A	
	High Range: 0.01 A	
	Accuracy: ± (1% of reading +5 counts)	
6020	Range: 0.005 - 26.00 A	
	Resolution: Low Range: 0.001 A	
	High Range: 0.01 A	
	Accuracy: ± (1% of reading +5 counts)	
6040	Range: 0.05 - 52.00 A	
	Resolution: 0.01 A	
	Accuracy: ± (1% of reading +5 counts)	
	Current (peak)	6005
Resolution: 0.1 A		
Accuracy: ± (1% of reading +5 counts)		
6010		
	Resolution: 0.1 A	
	Accuracy: ± (1% of reading +5 counts)	
	6020	Range: 0.0 - 76.0 A
Resolution: 0.1 A		
Accuracy: ± (1% of reading +5 counts)		
6040		Range: 0.0 - 152.0 A
	Resolution: 0.1 A	
	Accuracy: ± (1% of reading +5 counts)	
	Power	6005
Resolution: Low Range: 0.1 W		
High Range: 1 W		
Accuracy: Low Range: ± (2% of reading +15 counts) at PF > 0.2		
High Range: ± (2% of reading +5 counts) at PF > 0.2		
6010	Range: 0.0 - 1300W	
	Resolution: Low Range: 0.1 W	
	High Range: 1 W	
	Accuracy: Low Range: ± (2% of reading +15 counts) at PF > 0.2	
High Range: ± (2% of reading +5 counts) at PF > 0.2		
6020	Range: 0.0 - 2600 W	
	Resolution: Low Range: 0.1 W	
	High Range: 1 W	
	Accuracy: Low Range: ± (2% of reading +15 counts) at PF > 0.2	
High Range: ± (2% of reading +5 counts) at PF > 0.2		

Specifications

Measurement *(continued)*

	6040	Range: 0.0 - 5200 W Resolution: 1 W Accuracy: \pm (2% of reading +5 counts) at PF > 0.2
Power Factor		Range: 0.000 - 1.000 Resolution: 0.001 Accuracy: W/V/A, Calculated and displayed to three significant digits
Inrush Current		4 times the rated current
Enhanced Over Load Capacity		4 times the rated current, Short Circuit hold for 1000 ms

Settings

Remote Input Signal Interface (Option)		Test, Reset, Recall memory 1 through 7
Remote Output Signal		Pass, Fail, Test-in-Process
Surge/Drop Voltage		Selectable On/Off
Auto Run Mode Selection		Program/Manual
Sync Output Signal		DC Level 5 V
Timer		0 = Continuous, 0.1 - 999.9
Alarm Volume Setting		Range: 0 - 9; 0 = OFF, 9 = High
Auto Loop Cycle		0 = Continuous, 1 = OFF, 0 - 9999
Over Current Fold Back Mode		On/Off Setting
Single Step		On/Off Setting
Contrast		Range: 1 - 9, 9 = High
Power Up		Selectable On, Off, Last
Timer Units		Selectable Second, Minute, Hour
Hi & Lo Volt		Adjustable 0 - 300 V
Hi & Lo Frequency		Adjustable 40 - 500 Hz
Hi Current		Adjustable
End & Start Angle		Adjustable 0 - 359°
Results		Selectable All, Pass/Fail, Last

General

Memory		50 memories, 9 steps/memory
High/Low Limit Protection		Arms, Apeak, Power, Power Factor
Protection		Over Current Protection, Over Voltage Protection, Over Power Protection, Over Temperature Protection, Alarm

General *(continued)*

Interface		RS-232 & PLC Remote Standard Ethernet & GPIB Optional
Calibration		Front Panel Calibration
Efficiency		\geq 80% (at Full Load)
Operation Environment		0 - 40°C/20 - 80% RH

Mechanical

Fan		Built-in Cooling Fan
Front Panel Output		Universal Receptacle
Rear Panel Output		Universal Receptacle
	6005/6010/6020	Terminal Block (L, N, G)
	6040	
Dimension (W×H×D)		
	6005/6010	17 x 3.5 x 16 in (432 x 89 x 406 mm)
	6020	17 x 3.5 x 20 in (432 x 89 x 508 mm)
	6040	17 x 8.75 x 20 in (432 x 222x 508 mm)
Net Weight		
	6005	35 lbs (15.8 kg)
	6010	42 lbs (19 kg)
	6020	68 lbs (30.8 kg)
	6040	143 lbs (64.8 kg)

DC Output Voltage *(Optional)*

Max Power		
	6005	250 W
	6010	500 W
	6020	1000 W
	6040	2000 W
Max Current		
	6005	0 - 200 V: 2.3 A at < 110 V 0 - 400 V: 1.15 A at < 220 V
	6010	0 - 200 V: 4.6 A at < 110 V 0 - 400 V: 2.3 A at < 220 V
	6020	0 - 200 V: 9.2 A at < 110 V 0 - 400 V: 4.6 A at < 220 V
	6040	0 - 200 V: 18.4 A at < 110 V 0 - 400 V: 9.2 A at < 220 V
Ripple & Noise (RMS)		
	6005/6010/6020	Low Range: 0 - 200 V < 250 mV High Range: 0 - 400 V < 400 mV
	6040	Low Range: 0 ~ 200 V < 350 mV High Range: 0 ~ 400 V < 400 mV
Ripple & Noise (p-p)		
	6005/6010/6020	< 2.0 Vp-p
	6040	< 3.0 Vp-p

*Specifications subject to change. Additional detailed specifications and manual available online.

Associated Power Technologies, Inc. (APT) provides superior products and services to a variety of test & measurement, avionics, manufacturing, and military applications requiring power conversion equipment.

Our AC power sources are feature rich and highly adaptable to multiple applications. Our engineering group is focused on providing the latest technology to meet and exceed your expectations. We do this while keeping our power sources competitively priced.

Our value goes far beyond what our competition can provide. In addition to offering innovative and competitively priced products, all of our power sources are stocked and we guarantee to ship any instrument within 24 hours! We understand that your need for quality instrumentation is immediate and it hurts your bottom line to wait weeks for a piece of equipment. Furthermore, all of our power sources come with a 45 day satisfaction guarantee. This means that if you are unhappy with your purchase for any reason whatsoever, then you can simply return your power source to us within 45 days and we give you a full refund or credit towards another APT power source – no questions asked.

Lastly, all of our power sources come with a standard two-year warranty. Three-year and five-year warranties are also available.

We provide world class customer support and service so you can be confident that we will always be there standing behind our products. Our elite engineering group continues to develop exciting products to meet new testing demands. We can do this and more because we place our focus on you, the customer!

Please give us a call today!

Toll Free: +1-877-322-7693

APT...Power On!

APT offers two distinct lines of AC power sources: Our 6000 series of automated AC power sources and our 5000 series of manual AC power sources.

