

APS-1102 Programmable AC / DC Power Source Comparison Chart



GW INSTEK

Made to Measure

固緯電子實業股份有限公司

Comparison Chart

Brand Model		GW Insteek APS-1102	Kikusui PCR1000M	Chroma 61502	ExTech 6610
OUTPUT					
Maximum output power capacities	AC	1000VA	100VA	1000VA	1000VA
	DC	1000W	800W	500W	500W
Output mode	AC-INT	AC-internal signal source	(available)	(available)	(available)
	AC-EXT	AC-external signal source	EXT-AC	(available)	(available)
	AC-ADD	AC-internal + external source	(available)	(available)	(available)
	AC-SYNC	AC-external synchronization	(available)	(available)	(available)
	AC+DC-INT	DC-internal signal source	(available)	(available)	(available)
	AC+DC-EXT	DC-external signal source	EXT-DC	(available)	(available)
	AC+DC-ADD	DC-internal + external source	(available)	(available)	(available)
	AC+DC-SYNC	DC-external synchronization	(available)	(available)	(available)

Output Voltages	AC	100Vrange: 0V to 135Vrms	135Vrange: 1V to 135V	150Vrange: 0V - 150V	150Vrange: 0V - 150V
		200Vrange: 0V to 270Vrms	270Vrange: 2V to 270V	300Vrange: 0V - 300V	300Vrange: 0V - 300V
	DC	100Vrange: -190V to +190V	135Vrange: 1.4V to 190V	150Vrange: 0V - 212V	150Vrange: 0V - 200V
		200Vrange: -380V to +380V	270Vrange: 28V to 380V	300Vrange: 0V - 424V	300Vrange: 0V - 400V
	Resolution	0.1V	0.1V	0.1V	0.1V
	Accuracy(AC)	100Vrange: 0.5%+0.6rms	+/- (1% offset + 0.6V)	0.2%+0.2%F.S.	+/- (1% of reading + 2counts)
		200Vrange: 0.5%+1.2Vrms	+/- (1% offset + 1.2V)		
Maximum output currents	AC	100Vrange: 10A	135Vrange: 10A	150Vrange: 8A	150Vrange: 9.2A
		200Vrange: 5A	270Vrange: 5A	300Vrange: 4A	300Vrange: 4.6A
	DC	100Vrange: 10A	135Vrange: 8A	150Vrange: 4A	150Vrange: 4.6A
		200Vrange: 5A	270Vrange: 4A	300Vrange: 2A	300Vrange: 2.3A

Maximum peak currents		100Vrange: 40A	135Vrange: 30A	150Vrange:48A	150Vrange:27.6A
		200Vrange: 20A	270Vrange: 15A	300Vrange:24A	300Vrange:13.8A
Frequency setting	Range	1.0Hz to 550.0Hz	40Hz to 500Hz	15Hz to 1kHz	1Hz to 500Hz
	Accuracy	100ppm	within +/-2x10-4	0.15%	+/- 0.03% of setting
Phase when output is on		0.0deg to 359.9deg			
Output voltages		Sine, square, arbitrary			
Output voltage distortion rate		0.5%max (50Hz/60Hz)	0.5% or less	0.3% at 50/60Hz, 1% at other	<0.5% at 40 - 100Hz, <1% at 101 - 500Hz
Load regulation		0.5% max		0.2%	+/- (0.5% of output +0.5V)
Line regulation		0.2% max		0.1%	+/- 0.1V

Measurement Functions					
Output voltage	Measurements	DC average value, effective value, and peak value			
	Range(F.S.)	100Vrange : 225V		150Vrange: 150V	150Vrange:200V
		200Vrange : 450V		300Vrange: 300V	300Vrange:400V
	Accuracy(rms,average)	0.5% F.S.		0.2%+0.2%F.S.	+/- (1% of reading + 2counts)
Output current	Measurements	DC average value, effective value, peak value, and peak value hold			
	Range(F.S.)			48A (peak)	
	Accuracy (rms)	1% F.S.		0.4%+0.3%F.S.	+/- (1% reading + 5counts)
	Accuracy (peak)	3% F.S.		0.4%+0.6%F.S.	
Load power factor	Measurements Range	0.00 to 1.00	0 to 1	0.97 min.	0.00 to 1.00
Load crest factor	Measurements Range	0.00 to 50.00			
Output harmonic	Measurements	Up to 40th-order		2 to 40 orders	
External synchronization frequency	Measurements	38.0 to 525Hz			

Power Input					
Input voltage range		AC100V to AC230V +/- 10% (90V to 253V)	90V to 250V	90V to 250V	AC 110V/220V +/- 10%
Input frequency range		50Hz/60Hz (+/- 2Hz)	47 - 63Hz	47 - 63Hz	47 - 63Hz
Power consumption		1.4kVA max	1.6kVA	1.62kVA	
Power factor		0.95 min.(AC100V), 0.9 min.(AC200V)			0.0 to 1.0
General Information					
Interface		USB	RS232,GPIB,US B	RS232,GPIB	RS232,GPIB,PLC remote
Operation panel		5.7" LCD display			LCD
Dimensions		258(W)x176(H)x440 (D)		133x483x570mm	430x89x400mm
Weight		9.5kg	11kg	20kg	18.2kg
Price					