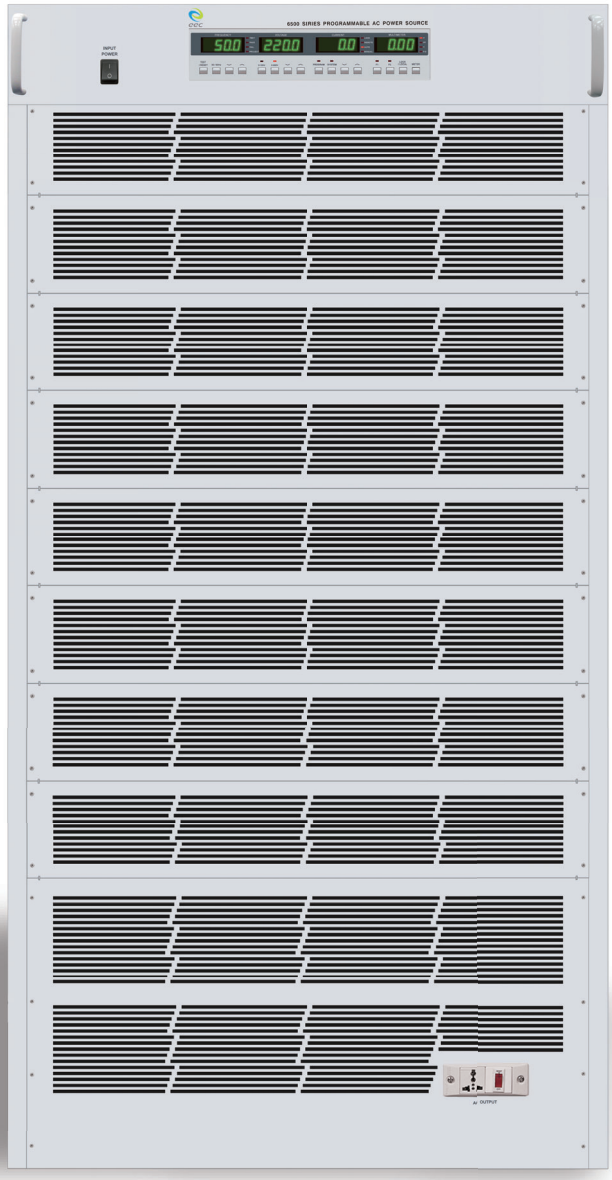
DATASHEET

6500 Series High Power Programmable AC Power Source

New Generation, New Power



* 6560

eec
Extech Electronics Co.
KONIX GROUP

The 6500 series high-power programmable single-phase AC power source features 80kVA output capacity. With 600V output voltage selection and a full range adjustable frequency of 45-70Hz, it is capable simulating a variety the electrical systems. Assorted communication interfaces allow it to be controlled remotely from the central computer.

Features

- Ramp-up and ramp-down settings deliver added flexibility and control over power distribution timing.
- Optional 350V or 600V output assures compatibility with ultra-high demand products such as electrical motors.
- Optional 360-440Hz or 760 – 840 Hz fully adjustable frequencies allow broader control, suitable for aerospace industry.
- EEC proprietary Over Current Fold (OCF) function automatically adjusts voltage, maintaining current for activating the device under test (DUT).
- Four LED displays clearly show frequency, voltage, current, and power status simultaneously.
- Eight (8) built-in memory sets with five (5) testing steps individually simulate a full range of test conditions.
- Lower than 1% total harmonic distortion (THD).
- Adding BNC connection on-top of exiting USB, RS-232, and GPIB interfaces provides additional remote control options for connecting to a centralized computer.



Model			6510	6520	6530	6540	6560	6580
OUTPUT								
Phase			1 Ø					
Power Rating			10 kVA	20 kVA	30 kVA	40 kVA	60 kVA	80 kVA
Voltage	Range		0 - 150V/0 - 300V or 0 - 175V/0 - 350V Selectable (Optional 0 - 350V) or 0 - 300V/0 - 600V Selectable (Optional 0 - 600V)					
	Resolution		0.1 V					
	Accuracy[1]		± (1% of setting + 2 counts)					
Max. Current (r.m.s)[2]	0 - 150 V		84.0 A	168.0 A	252.0 A	336.0 A	504.0 A	672.0A
	0 - 300 V		42.0 A	84.0 A	126.0 A	168.0 A	252.0 A	336.0A
Max. Current (r.m.s)[3] for option 0 - 350 V	0 - 175 V		72.0 A	144.0 A	216.0 A	288.0 A	432.0 A	576.0A
	0 - 350 V		36.0 A	72.0 A	108.0 A	144.0 A	216.0 A	288.0A
Max. Current (r.m.s)[4] for option 0 - 600 V	0 - 300 V		42.0 A	84.0 A	126.0 A	168.0 A	252.0 A	336.0A
	0 - 600 V		21.0 A	42.0 A	63.0 A	84.0 A	126.0 A	168.0A
Frequency	Range		45.0 - 70.0Hz/45.0 - 500.0Hz (Optional 45 - 500Hz) Full Range Adjust					
	Resolution		0.1 Hz / 1 Hz					
	Accuracy		± 0.02% of setting					
Total Harmonic Distortion (THD)[5]			< 1% for 110 / 220V, 50 / 60Hz for 300V and Option 350V at Resistive Load < 1.2% for 220 / 440V, 50 / 60Hz for Option 600V at Resistive Load					
Inrush Current			3 times rated Current(r.m.s)					
Crest Factor			3 times rated Current(r.m.s)					
Line Regulation			± 0.1 V					
Load Regulation			± (0.5% of output + 0.5 V) at Resistive Load					
Ramp up / Ramp down	Range		0.1 - 999.9s					
	Resolution		0.1s					
	Accuracy		± (0.1% of setting + 0.2s)					
INPUT								
Phase			3Ø4W					
Voltage			220 (L - N) / 380 Vac (L - L) ±10%					
Max. Current[6]			25 A	50 A	75 A	100 A	150 A	200 A
Frequency			47 - 63 Hz					
Power Factor			0.8					
MEASUREMENT								
Voltage	Range		0.0 - 300.0 V / 0.0 - 600.0 V					
	Resolution		0.1 V / 0.2 V					
	Accuracy		± (1% of reading + 2 counts) at Voltage > 5 V					
Current	Range	L	0.00 - 35.00 A				0.0 - 350.0 A	
		H	30.0 - 350.0 A				300 - 504 A	
	Resolution[7]	L	0.01 A				0.1 A	
		H	0.1 A				1 A	
	Accuracy	L	± (1% of reading + 5 counts)[8]					
		H	± (1% of reading + 1 count)[8]					
Current (Optional 0 - 600 V)	Range	L	0.00 - 35.00 A				0.0 - 350.0 A	
		H	30.0 - 350.0 A				300 - 504 A	
	Resolution[7]	L	0.01 A				0.1 A	
		H	0.1 A				1 A	
	Accuracy	L	± (1% of reading + 5 counts)[8]					
		H	± (1% of reading + 1 count)[8]					
Frequency	Range		45.0 - 850.0 Hz					
	Resolution		0.1 Hz					
	Accuracy		±0.1 Hz					
Power	Range	L	0.000 - 3.500 kW				0.00 - 35.00 kW	
		H	3.00 - 40.00 kW				30.0 - 80.0 kW	
	Resolution	L	0.001kW				0.01KW	
		H	0.01kW				0.1KW	
	Accuracy	L	± (1.5% of reading + 5counts) at Voltage > 5 V (1.5% of reading + 5counts) at Voltage > 5 V					
		H	± (1.5% of reading + 1count) at Voltage > 5 V					
General								
Remote Input Signal Interface			ON / OFF, P1, P2, P3					
Memory			8 Memory Set, 5steps per memory for Voltage, Frequency, Test Time, Delay time and Current, Power, Hi, Lo Limit setting					
Sync Output Signal			Yes					
Display			4 group pf digital LED displays					
Protection			OCP, OVP, OPP, OTP, LVP, Short Circuit ; Alarm and shutdown					
Interface[9]			Standard USB & RS232, Option GPIB & Analog card					
Operation Environment			0 - 40° C / 20 - 80% RH					
Dimension (W x H x D), mm[10]			430 x 472 (579) x 650 (730)	430 x 732 (839) x 650 (730)	600 x 972 (1079) x 900 (980)	600 x 972 (1079) x 900 (980)	800 x 1557 (1662) x 900 (980)	800 x 1557 (1662) x 900 (980)
Dimension (PFC)(W x H x D), mm[10]			430 x 602(709) x 650 (730)	430 x 732 (839) x 650 (730)	-	600 x 972 (1079) x 900 (980)	800 x 1557 (1662) x 900 (980)	-
Weight			128 kg	198 kg	397 kg	450 kg	600 kg	800 kg
Weight (PFC)			228 kg	350 kg	-	663 kg	885 kg	-

1. When output voltage < 30V, ADJ = ON can be meet this spec.
2. Maximum current when output voltage at 120/240V.
3. Maximum current when output voltage at 140/280V.
4. Maximum current when output voltage at 240/480V.
5. < 1.2% for < 47Hz at output voltage within the 110 - 140V at Low Range or the 220 - 280V at High Range (incl. 45 - 500Hz).
   < 1% for ≥ 47Hz at output voltage within the 110 - 140V at Low Range or the 220 - 280V at High Range (incl. 45 - 500Hz).
   < 1.2% for output voltage within the 220 - 280V at Low Range or the 440 - 560V at High Range (option 0 - 600V).
   < 1.5% for < 47Hz at output voltage within the 220 - 280V at Low Range or the 440 - 560V at High Range (option 0 - 600V & 45 - 500Hz).
   < 1.2% for ≥ 47Hz at output voltage within the 220 - 280V at Low Range or the 440 - 560V at High Range (option 0 - 600V & 45 - 500Hz).
6. Max. Current without PFC Function
7. a. When output frequency ≥ 100Hz & ≤ 500Hz & N-G short, the current meter guarantee minimum current from 0.01A.
   b. When output frequency ≥ 500Hz & N-G short, the current meter guarantee minimum current from 0.02A.
   c. When output frequency ≥ 100Hz & ≤ 500Hz & N-G short, the current meter guarantee minimum current from 0.02A at 600V models.
   d. When output frequency ≥ 500Hz & N-G short, the current meter guarantee minimum current from 0.03A at 600V models.
8. At Voltage > 5V for 0 - 300V; At Voltage > 10V for 0 - 600V (Optional).
9. Only one interface can be selected among RS232 & USB, Analog & GPIB interface card.
10. Figure in parentheses are maximum values with fixture stand.

Models

- 6510 High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (10kVA)
- 6510P High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (10kVA) with PFC
- 6520 High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (20kVA)
- 6520P High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (20kVA) with PFC
- 6530 High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (30kVA)
- 6540 High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (40kVA)
- 6540P High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (40kVA) with PFC
- 6560 High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (60kVA)
- 6560P High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (60kVA) with PFC
- 6580 High Power Programmable AC Power Source 0 - 300V/45 - 70Hz (80kVA)

Options

- OPT.109 Replace RS232 Interface by GPIB Interface
- OPT.608 Output Voltage 600V for 6510, 6520 & Models with PFC
- OPT.609 Output Voltage 600V for 6530, 6540, 6560, 6580 & Models with PFC
- OPT.616 Output Frequency 45 - 500Hz for 6510 & 6510P
- OPT.650 Remote Sensing
- OPT.668 Suppression Input Voltage
- OPT.671 RCP Function for 6510, 6520, 6530 & Models with PFC
- OPT.672 RCP Function for 6540, 6560, 6580 & Models with PFC
- OPT.673 Earthquake Proof
- OPT.674 Output Voltage 350V

Visit our website
https://www.eecextech.com

For general inquires
Email us at sales@eecextech.com

About Extech Electronics Co.
For 40 years, Extech Electronics Co. (EEC) has been producing cutting-edge electrical safety testers and AC power sources for a variety of industries. We strive to earn our customers' trust by consistently offering dependable products, services, and reliable support for all testing applications.

EEC Headquarter
17F., No.237, Sec. 1, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
Tel: +886-2-21653066
Fax: +886-2-21653077
EECsales_TW@eecextech.com

China
Contact Us at 400-780-2008

Malaysia
Tel: +60-3-78429168
Fax: +60-3-78426168
EECSales_MSIA@eecextech.com

Suzhou
Tel: +86-512-68088351
Fax: +86-512-68088359
EECsales_CN@eecextech.com

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