ELECTRONIC TEST & POWER SYSTEMS

ELPA-3260

AC ELECTRONIC LOAD WITH ADJUSTABLE PF

POSITIVE PROBLEM SOLVING

While primarily aimed at AC applications, this electronic load can also be used for DC testing. A comprehensive feature set is provided as standard.

Stored within the units non-volatile memory is a waveform bank. When in constant current operation the user can select between sine, square and DC waveforms. Peak currents can be simulated with the crest factor mode. A leading or lagging power factor can be set with adjustments from unity to between 0.85 and 0.3. The desired wave can be recalled from the front panel or selected via the GPIB and RS232 interfaces.

- Sine, Step & Squarewave Loading Functions
- Adjustable Leading & Lagging Power Factor
- GPIB & RS-232 with LabVIEW Drivers
- Last Setting Memory Function
- CC, CR & Crest Factor Mode
- DC to 400Hz Operation

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FURTHER DETAILS

The loads can also be operated in constant resistance or linear CC mode. To aid production testing upper and lower limits can be set with GO/NG indication. The dual 4½ digit displays simultaneously display the voltage and current taken by the load. A wattmeter and VAmeter are also provided.

An analogue output is provided on the front panel for connecting to a scope so that the actual load current can viewed. This AC loads is used in many production test and laboratory applications. With its ability to sink step and squarewaves the unit is particularly suitable for Inverter, AVR & UPS testing.

SELECTION TABLE

Part Number	Max Power	Maximum Voltage	Current Range	Dimensions [W × H × D]
ELPA-3261	1800VA	300Vrms / 300 Vdc	0 - 18Arms	19" × 4U × 445mm

CHARACTERISED VALUES

ELPA-3261	
VOLTAGE	**CURRENT**
50Vrms	18Arms
40Vrms	14.4Arms
30Vrms	10.8Arms
20Vrms	7.2Arms
10Vrms	3.6Arms

TECHNICAL DATA

	ELPA-3261
Current Monitor (Isolated)	4.5A / V
Weight	21.5kg
Line Input	115 / 230Vac ±10% at 50/60Hz
CC & LINEAR CC MODE	
Range 1	0 - 9Arms
Range 1 Resolution	2.25mA
Range 2	9 - 18Arms
Range 2 Resolution	4.5mA
Low Current Accuracy	<900mA is ± 2% of (setting + range)
Standard Accuracy	± (0.5% of reading + 1% of range)
Standard Accuracy at 50 / 60Hz	± 0.5% of (setting + range)
Crest Factor (CC Mode only)	√2 to 3.5 | 1.5 to 1.9 | 3.0 to 3.4
Crest Factor Resolution	0.5 | 0.1 | 0.1
Frequency Range	CCMode: DC, 40-400Hz, LIN Mode: DC - 400Hz
CR MODE	
Range 1	3.333 - 13.332kΩ
Range 1 Resolution	0.019mS
Range 2	13.332 - 53.332kΩ
Range 2 Resolution	0.076mS
Accuracy	± (0.5% of reading + 2% of range)
Accuracy at 50 / 60Hz	± 0.5% of (setting + range)
Frequency Range	CR Mode: DC - 400Hz
4½ DVM	
Range & (Resolution)	300V (0.1V)
Accuracy	± (0.5% of reading + 0.2% of range)
4½ DAM	
Range & (Resolution)	0 - 18A (1mA)
Accuracy	± 0.5% of (reading + range) at 50 / 60Hz only otherwise ± (0.5% of reading + 2% of range)
WATT & VA METER	
Range & (Resolution)	1800W (100mW)
Accuracy	± 0.5% of (reading + range)
Accuracy at 50 / 60Hz	± 0.5% of (reading + range)
VA Meter	Vrms × Arms corresponds to Vrms and Arms
PROTECTION	
Over Power Protection	1890VA
Over Current Protection	18.8A
Over Voltage Protection	315Vrms
Over Temperature Protection	~85°C

POWER & CREST FACTOR TABLE

Waveform Bank	Sinewave	Sinewave	Sinewave	CF = 2	CF = 2.5	CF = 3.5	CF = 2	CF = 2.5	CF = 3.5	Square	DC
	0	1	2	3	4	5	6	7	8	9	10
A	√2	1.5	3.0	PF: - 0.85	PF: - 0.70	PF: - 0.50	PF: +0.85	PF: +0.70	PF: +0.50	1	√2DC
B	2	1.6	3.1	PF: - 0.80	PF: - 0.65	PF: - 0.45	PF: +0.80	PF: +0.65	PF: +0.45	1.1	2DC
C	2.5	1.7	3.2	PF: - 0.75	PF: - 0.60	PF: - 0.40	PF: +0.75	PF: +0.60	PF: +0.40	1.2	2.5DC
D	3.0	1.8	3.3	PF: - 0.70	PF: - 0.50	PF: - 0.35	PF: +0.70	PF: +0.50	PF: +0.35	1.3	3DC
E	3.5	1.9	3.4	PF: - 0.65	PF: - 0.40	PF: - 0.30	PF: +0.65	PF: +0.40	PF: +0.30	1.4	3.5DC
				Lagging Power Factor			Leading Power Factor				

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