

ELPA-3250

AC ELECTRONIC LOAD MODULES



POSITIVE PROBLEM SOLVING **+ =**

Available as a plug in load module the ELPA-3250 series has 3 models with a choice of voltage and current ranges. These modules can be housed within the 3302C single slot mainframe.

Alternatively the rack mounting 3300C mainframe can accommodate up to 4 modules. This approach allows load modules from other ranges to be operated or mixed in the same mainframe. These AC Loads operate in constant current and constant resistance modes and can also be used to sink DC Sources. Dual 4½ digit displays clearly show the voltage and current values at the load terminals.

- + One Unit to Sink AC or DC sources
- + CC, CR & Crest Factor Mode
- + Adjustable Power Factor
- + GO/NG Limit Check
- + Remote Sense

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FURTHER DETAILS

Remote sense is provided to counter any voltage drop in the load lines. A front panel memory with an auto sequencing function is also provided. This is ideal to quickly implement common test procedures when the load's are used on the benchtop. For batch testing upper and lower limits can be adjusted to signal pass or fail.

An isolated current monitor is provided on the front panel. This is configured as a BNC socket making it ideal for viewing the actual load current on an oscilloscope.

The user can recall sine, square or DC waves from a bank of 55 common waveforms. The bank contains crest factor modes enabling high current peaks to be simulated. The power factor can also be adjusted in steps between 0.3 lagging and 0.3 leading. An external analogue input enables the ELPA-3250 to load according to an external signal. This allows complex waveforms to be set up on a function generator. Waveforms can be recalled or enabled from the front panel or via the RS232 interface or the optional GPIB interface.

SELECTION TABLE

Part Number	Max Power	Maximum Voltage	Current Range	Dimensions [W x H x D]
ELPA-3250	300VA	60Vrms / 60VDC	0 - 20Arms	108 x 143 x 405mm
ELPA-3251	300VA	150Vrms / 150VDC	0 - 8 Arms	108 x 143 x 405mm
ELPA-3252	300VA	300Vrms / 300VDC	0 - 4 Arms	108 x 143 x 405mm

Different output ranges and application/user specific options are possible. Please contact ETPS Ltd to discuss your requirements.

OPTIONS

CODE	DESCRIPTION
/3302C	Single slot mainframe with RS-232 [separate summary available]
/3302C-GPIB	Single slot mainframe with RS-232 & IEEE 488.2 [see separate summary]
/3300C	4 slot mainframe with RS-232 [separate summary available]
/3300C-GPIB	4 slot mainframe with RS-232 & IEEE 488.2 [separate summary available]
/0001	1m IEEE488.2 cable
/0002	2m IEEE488.2 cable
/0003	2m RS-232 cable
/9931	Remote controller



TECHNICAL DATA

	ELPA-3250	ELPA-3251	ELPA-3252
I Monitor (Isolated)	5A / V	2A / V	1A / V
Frequency Range	DC, 40 to 400Hz (CC Mode) DC - 400Hz (LIN CC & CR Mode)		
Protections	Over power, over current, over voltage & over temperature		
Weight	3.5kg		
CC & LIN CC MODE			
Range 1 / Range 2	0 - 10Arms / 10 - 20Arms	0 - 4Arms / 4 - 8Arms	0 - 2Arms / 2 - 4Arms
Resolution (R1 / R2)	2.5mA / 5mA	1mA / 2mA	0.5mA / 1mA
Accuracy	± 0.5% of (setting + range)		
Low Current Accuracy	0 - 1A is ± 2% of (setting + range)	0 - 400mA is ± 2% of (setting + range)	0 - 200mA is ± 2% of (setting + range)
Crest Factor	√2 to 3.5 / 1.5 to 1.9 / 3.0 to 3.4 (resolution 0.5/0.1/0.1)		
CR MODE			
Range 1 / Range 2	0.3 - 1.2kΩ / 1.2 - 4.8kΩ	1.875 - 7.5kΩ / 7.5 - 30kΩ	7.5 - 30kΩ / 30 - 120kΩ
Resolution (R1 / R2)	0.83mS / 0.2083mS	0.13mS / 0.033mS	0.033mS / 0.0083mS
Accuracy	± 0.5% of (setting + range)		
4½ DVM			
Range & (Resolution)	0 - 60V (10mV)	0 - 150V (10mV)	0 - 300V (100mV)
Accuracy	± (0.5% of reading + 2% of range)		
4½ DAM			
Range & (Resolution)	0 - 20A (10mA)	0 - 8A (1mA)	0 - 4A (1mA)
Voltage Accuracy	± 0.5% of (reading + range) at 50 / 60Hz only otherwise ± (0.5% of reading + 2% of range)		
WATT METER			
Range & (Resolution)	0 - 300W (100mW)		
Accuracy	± (0.5% of reading + 3W)		
VA METER			
VA Meter	Vrms × Arms corresponds to Vrms and Arms		

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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