

# EAC-I

## DUAL RANGE AC POWER SOURCES



POSITIVE PROBLEM SOLVING **+ =**

**The EAC-I is a highly versatile single phase AC Power Supply. In-built pulse width modulation technology allows for systems to be built into a lightweight 3U rackmounting case.**

Each system features two current and voltage ranges which are user selectable by the simple switch of a button. This wide output range makes the EAC-I ideal for a wide range of military, aerospace and power conversion test applications. Full control of the unit is provided by simple front panel operation as standard. For remote control and automated test systems both isolated analogue and computer interfaces are available.

- + Wide Single Phase Input Range as Standard**
- + Various Remote Control Interfaces Available**
- + User Selectable Output Voltage Range**
- + Lightweight and Compact Design**
- + CV Mode for Voltage Limiting**

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## FURTHER DETAILS

The standard wide single phase input provides a typical input power factor of 0.99, allowing the EAC-I to operate under varying grid conditions found within most countries worldwide.

Each system features a graphical display with an extensive set of measurement functions. This includes effective, apparent and idle power along with voltage, average and peak current values. Power factor and crest factor values are also displayed.

Where rack space is restricted, a smaller lower cost model is available with a 16x2 character VF display instead of the standard graphical display. This is ideal for crowded laboratories or ATE integrations where space is often at a premium. The compressed format is built with front panel control as standard, with an additional IEEE 488.2 or RS232 interface available on request.

Besides standard units, higher power and three phase models can be specified to meet a particular requirement.

### SELECTION TABLE

Part Number	Max Power	Output Voltage [Range 1 / Range 2]	Output Current [Range 1 / Range 2]	Dimensions [ W x H x D]
EAC-I 500	500VA	0 - 135 Vrms / 0 - 270 Vrms	0 - 4A / 0 - 2A	19" x 3U x 620mm
EAC-I 1000	1kVA	0 - 135 Vrms / 0 - 270 Vrms	0 - 8A / 0 - 4A	19" x 3U x 620mm
EAC-I 1500	1.5kVA	0 - 135 Vrms / 0 - 270 Vrms	0 - 12A / 0 - 6A	19" x 3U x 620mm
EAC-I 2000	2kVA	0 - 135 Vrms / 0 - 270 Vrms	0 - 16A / 0 - 8A	19" x 3U x 620mm
EAC-I 3000	3kVA	0 - 135 Vrms / 0 - 270 Vrms	0 - 24A / 0 - 12A	19" x 3U x 620mm

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

### OPTIONS

CODE	DESCRIPTION
/ATI-5	Isolated 0-5V analogue interface for all control and measurement functions
/ATI-10	Isolated 0-10V analogue interface for all control and measurement functions
/LT	IEEE 488.2 interface
/LTRS232	RS232 interface
/LTRS485	RS485 interface
/USB	USB interface
/LAN	Ethernet interface
/MINI	Reduced size unit, built with front panel control and 16x2 character VF display instead of standard graphical display screen. Model dimensions $\leq 1500VA$ : [WxHxD] 19" x 2U x 500mm, model dimensions $\geq 2kVA$ : [WxHxD] 19" x 3U x 520mm

## TECHNICAL DATA

	EAC-I 500	EAC-I 1000	EAC-I 1500	EAC-I 2000	EAC-I 3000
Dimensions	19" × 3U × 620mm (reduced size optionally available)				
Weight	24kg	25kg	27kg	34kg	39kg
Operating Temperature	0 - 45°C (up to 50°C with derating)				
Safety	EN 60950				
EMC	EN 55022 class A				

### INPUT

Voltage (Single Phase)	90-265VAC	90-265VAC	90-265VAC	185-264VAC	185-264VAC
Frequency	47 - 63Hz				
Power Factor	0.99 typical at full load				
Efficiency	85% typical				

### AC OUTPUT

Power	500VA (400W)	1kVA (800W)	1.5kVA (1200W)	2kVA (1600W)	3kVA (2400W)
Voltage Range 1 & 2	Range 1 : 0-135 Vrms, range 2 : 0 - 270Vrms				
Voltage Resolution	0.1V				
Voltage Accuracy	0.5% of F.S.	0.5% of F.S.	0.5% of F.S.	1% of F.S.	1% of F.S.
Frequency	90-265VAC	90-265VAC	90-265VAC	185-264VAC	185-264VAC
Frequency Resolution	0.01Hz				
Frequency Accuracy	0.2% of F.S.				
Maximum Current [Range 1]	4A	8A	12A	16A	24A
Maximum Current [Range 2]	2A	4A	6A	8A	12A
Crest Factor	3:1				
Distortion	<2% THD at 220VAC, 50Hz				
Load Power Factor	0.8 lag to 0.8 lead				
Line Regulation	± 0.1%				
Load Regulation	± 1%				
Efficiency	>85% at nominal input and full load				

### PROTECTION

Overload / Short Circuit	Output trip and indication
Over Temperature	Output trip and indication
Input Side	Fast acting fuse

### CONTROL AND SIGNALS

Input Power ON/OFF	Rocker switch with indicator				
Voltage Accuracy	± 0.5% of F.S.	± 0.5% of F.S.	± 0.5% of F.S.	± 2% of F.S. + 1 digit	± 2% of F.S. + 1 digit
Voltage Resolution	0.1V	0.1V	0.1V	1V	1V
Current Accuracy	± 0.5% of F.S.	± 0.5% of F.S.	± 0.5% of F.S.	± 2% of F.S. + 1 digit	± 2% of F.S. + 1 digit
Current Resolution	0.1A				
Power Accuracy	± 2% of F.S.	± 2% of F.S.	± 2% of F.S.	± 5% of F.S. + 1 digit	± 5% of F.S. + 1 digit
Power Resolution	1W				
Fault Alarm	Common LED alarm for fault conditions (over load and over temperature)				
Output Control & Monitoring	Front panel control as standard with optional interfaces available (see options table overleaf)				
Display	Graphical display featuring values for: average & peak current; voltage; power & crest factor; effective, idle & current power				



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Tel: +44 (0) 1246 452909  
Sales: 0800 612 95 75  
sales@etps.co.uk  
www.etps.co.uk

ETPS Ltd  
Unit 14, The Bridge  
Beresford Way, Chesterfield  
S41 9FG



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