

# EAC-S

## ADVANCED PROGRAMMABLE AC SOURCE



POSITIVE PROBLEM SOLVING **+ =**

The EAC-S is designed for exacting users who demand a high quality adjustable waveform. The distortion level at full power is a mere 0.1%.

Sine, triangular and square waves at up to 500Hz (2kHz option) can be selected. Operation at low frequencies all the way down to dc level is provided as standard. A DC offset can be combined with the AC voltage ensuring that almost any waveform can be created. The user can also preset the starting phase angle when the output is activated.

- + CV & CC Modes for Voltage and Current Limiting
- + Memory Function for Loading User Waveforms
- + Measurements Include CF, PF,  $I_{PEAK}$  &  $I_{EFF}$
- + Very Low Distortion Levels of 0.1%
- + DC Mode Operation

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## FURTHER DETAILS

The AC Source is loaded with a waveform for pre-compliance testing to the volts and interrupts standard EN 61000-4-11. Users can also create their own waveforms and load them into the unit via an SD card.

Another useful function is the external oscillator input. This enables complex waves to be set up on a signal generator and essentially amplified through the EAC-S. A host of measurement functions are available including true, apparent and reactive power along with average, effective and peak values for both voltage and current. The power factor and crest factor values are also displayed.

### SELECTION TABLE

Part Number	Max Power	Output Voltage AC Mode	Output Voltage DC Mode	Output Current	Dimensions [ W × H × D ]
EAC-S 500	500VA	0 - 300 Vrms	0 - 425Vdc	0 - 6A	19" × 4U × 435mm

## HIGHLIGHTED FEATURES

### WAVEFORM CREATION

By analysing devices under a variety of operational waveforms, potential design faults can be identified before mass production commences. Most common waveforms are preinstalled, with the ability to edit both V and I output characteristics.

### INTERFACES

A variety of interfaces are available providing unrivalled flexibility for users. Besides front panel operation, the system is configured with RS-232, RS-485, CAN, LAN and IEEE interfaces for remote control.

### SD MEMORY CARD

An integrated SD card provides a convenient low cost method of recording and editing complex waveforms, using simple WAV or script files via a PC.

## TECHNICAL DATA

GENERAL	
Input Voltage	230VAC, 50 / 60Hz
Safety	EN 61010
Emissions	EN 61000-6-3
Immunity	EN 61000-6-1
Output Power	See table
Output Voltage Range	See table
Max. Output Current	See table
Frequency Range	DC, 1 - 500Hz
Mains Regulation	0.1%
Load Regulation	0.1%
Distortion Factor at Maximum Power	0.1%
Transient Response Time at 400Hz	Typically 30µs for 10 to 90% load change
Transient Response Time at 50Hz	Typically 240µs for 10 to 90% load change
Transient Response Time at 10Hz	Typically 1.2ms for 10 to 90% load change
AC Voltage Setting Resolution	100mV via interface and front panel
DC Voltage Setting Resolution	100mV via interface and front panel
Current Setting Resolution	10mA via interface and front panel
Phase Angle Resolution	0.1° via interface and front panel
Frequency Setting Resolution	0.1Hz via interface and front panel
Accuracy of Setting and Readback	± 0.1% of full scale value
Output Frequency Range	0 - 500Hz
Measurement Resolution Voltage	10mV via interface and front panel
Measurement Resolution Current	1mA via interface and front panel
Measurement Resolution Power	10mW via interface and front panel
Memory Card Format	SD/MMC (slot on front panel)
Computer Interfaces	RS-232, RS-485, CAN, USB, Ethernet(LAN), IEEE488.2 (GPIB)
Operating Temperature Range	0 to +40°C
Storage Temperature Range	-40 to +85°C
Cooling	Forced air

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