

EAC-5302A

AC SOURCE WITH POWER ANALYSER



POSITIVE PROBLEM SOLVING **+ =**

The EAC-5302A is a linear single phase AC Power Supply with built in Power Analyser. This integrated approach provides users with real time analysis of a device under test.

A large LCD panel screen can display 9 different key power measurements including power factor, inrush current and watt-hours. External power supplies can be accurately measured, with inrush currents tests up to 200A possible. The front panel memory function allows frequently used test parameters to be stored and quickly recalled. Each unit is built with an RS-232 remote control interface as standard.

- + OT, OC, OP and Short Circuit Protection**
- + 0 - 360° Power ON/OFF Angle Control**
- + Measurements from 1mW to 270W**
- + EN 61000-4-11 Regulatory Tests**

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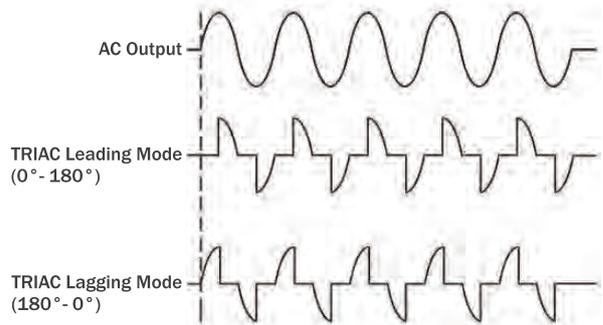
TEST APPLICATIONS

When used in conjunction with an Electronic Load from ETPS, the EAC-5302A provides instant values for the input/output power and efficiency of a device under test as shown below left. A dedicated application mode can simulate the power output of devices which use a TRIAC, such as light dimmers or small motor controls.

INPUT/OUTPUT POWER & EFFICIENCY MEASUREMENT

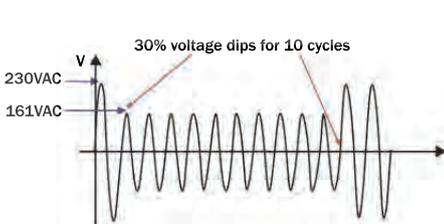


SIMULATION OF TRIAC POWER OUTPUT

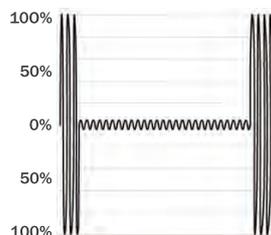


The EAC-5302A also performs all EN 61000-4-11 regulatory tests. These regulations define the requirements and conditions to test how power systems behave under changes to the AC mains voltage. It is frequently used to show compliance. The three standard tests are voltage dips, short interruptions and voltage variation immunity tests.

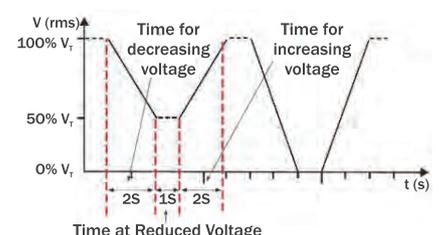
VOLTAGE DIPS



SHORT INTERRUPTIONS



VOLTAGE VARIATION IMMUNITY TESTS



SELECTION TABLE

Part Number	Maximum Power	Output Voltage [Range 1]	Output Voltage [Range 2]	Output Current [Range 1]	Output Current [Range 2]
EAC-5302A	270VA	10 - 150 Vrms	160 - 305 Vrms	0 - 2A	0 - 1A

TECHNICAL DATA

TECHNICAL DATA	
AC Input Power	115/230 Vac \pm 10%, 50/60Hz
Power Rating	270VA (maximum)
Voltage Range	Range 1 : 10-150 Vrms, range 2 : 160 - 305Vrms
Voltage Accuracy	0.2% \pm 0.2% of full scale
Voltage Resolution	Range 1 : 0.1V, range 2 : 0.2V
Distortion	<0.5% THD (with a resistive load)
Load Regulation	\pm 0.5% \pm 0.5V
Line Regulation	\pm 0.5% \pm 0.5V
Maximum Current [Range 1]	2Arms
Maximum Current [Range 2]	1Arms
Frequency	40-70Hz
Frequency Resolution	0.1Hz
Triac Mode	Leading / lagging
Triac Mode Range	0-180°
Triac Mode Resolution	1°
Angle [On/Off]	0 - 360°
Angle Resolution	1°
Protection	Over current, over temperature, over power, short circuit
Cooling	Fan cooled

MEASUREMENTS	
ACV Meter [Vrms]	Range 1: 150V, range 2: 305V
ACV Meter Resolution	0.1V
ACV Meter Accuracy	\pm 0.5% of reading + range
ACA Meter [Arms]	10mA / 20mA / 200mA / 2A / 200A (for inrush)
ACA Meter Resolution	0.01mA / 0.01mA / 0.1mA / 1mA / 0.1A (for inrush)
ACA Meter Accuracy	\pm 0.5% of reading + range / \pm 2% of reading + range (for inrush)
ACW Meter	1.5W / 3W / 6W / 30W / 60W / 300W / 600W
ACW Meter Resolution	0.001W / 0.001W / 0.001W / 0.01W / 0.01W / 0.1W / 0.1W
ACW Meter Accuracy	\pm 0.5% of reading + range
DCW Meter	Same as ELP-3310F series (recommended electronic load)
PF Meter	\pm 0.01 to 1
PF Meter Resolution	0.01
PF Meter Accuracy	1% of reading + range
Frequency Meter	40 - 70Hz
Frequency Meter Resolution	0.1Hz
Frequency Meter Accuracy	\pm 0.1Hz
Efficiency Meter	Corresponds to ACW and DCW, \pm 1% of reading + range
Integration Meas. Power	From 0.000mWH to 999.9kWH
Integration Meas. Time.	From 1 second to 99 hours 59 minutes and 59 seconds
Inrush Delay/ Period	0 - 99.9MS / 0.1 - 99.9S
Meter Meas. Rate Interval Time	100ms / 200ms / 500ms / 1s / 5s / 10s
Interface	RS-232
External AC Source	300Vrms / 2A / 600VA

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.



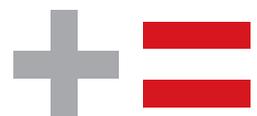
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**WE ARE
POSITIVE
PEOPLE**
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ETPS engineer electronic power supply and testing systems. Our problem solving skills provide the spark of innovation to some of the world's leading technology brands.



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