



ESU-2300

Basic Features - ESU-2300

- ◆ Measurements via Industry Standard Current Sensing Method
- ◆ Built-In RF Current Transformer (Pearson® Coil)
- ◆ True RMS Readings Using DFA® Technology
- ◆ Performs Output, RF Leakage & CQM Tests
- ◆ Main Test Loads from 50 to 750 Ohms
- ◆ External Test Loads Supported
- ◆ Auxiliary Test Load – 200 Ohms
- ◆ Independent Variable CQM Test Load – 1 to 500 Ohms
- ◆ Non-Inductive Internal Load Resistors
- ◆ Graphical Display with Backlighting & Simultaneous Details of Parameters & Scrolling Option Control
- ◆ Bright-White Display Backlight
- ◆ Rechargeable Battery or Line Powered Operation
- ◆ Isolated Oscilloscope Output
- ◆ Full Remote Operation
- ◆ USB & RS232 Serial Ports
- ◆ Digital Battery Monitor
- ◆ Flash Programmable, Field Upgradeable
- ◆ Tactile Keys With Audible Feedback

The ESU-2300 Analyzer is for users who prefer a conventional instrument with internal, selectable test loads. Utilizing the same Patent-Pending DFA® Technology as our new ESU-2050, the ESU-2300 uses industry standard current sensing technology rather than relying on less accurate voltage measurement techniques offered by some competitive products.

The ESU-2300 uses advanced ultra-high-speed waveform sampling techniques to accurately analyze even the most complex electrosurgery generator waveforms. You can easily analyze Coag waveforms like Desiccate, Fulgurate or even Spray with the same accuracy as pure sinusoidal Cut waveforms. RMS current (ma) and power (watts) can be easily read from the large LCD graphical display. A whisper quiet fan keeps the internal non-inductive load resistors running cool.

Added features like CQM Testing, RF Leakage Current measurement, a Rechargeable Battery, USB and RS232 com ports, BNC output, universal power supply and the ability to easily update the instrument's firmware in the field via our unique Flash Update Utility Software put the ESU-2300 in a class of its own.

SPECIFICATIONS

Measurement

Method Industry Standard Current Sensing using RF Current Transformer (Pearson® Coil)

Power

Range 1.0 to 400.0 Watts RMS

Resolution 0.1 Watts

Accuracy $\pm 5\%$ Reading or ± 3 Watts (whichever is greater)

Current

Range 30 to 2500 mA RMS

Resolution 1 mA

Accuracy $\pm 2.5\%$ Reading or ± 15 mA (whichever is greater)

Limits

Bandwidth 10 kHz to 10 MHz

Crest Factor 1.4 to 500

Voltage 10,000 V Peak

Loads

Main Test Load Range 50 to 750 Ohms

Resolution 50 Ohms

Accuracy $\pm 1\%$ (DC)

Duty Cycle 50% (1 minute period)

Auxiliary Test Load Fixed 200 Ohms

Accuracy $\pm 1\%$ (DC)

Rating 225 Watts

CQM Test Load (Contact Quality Monitor test load is an independent variable load)

Range 1 to 500 Ohms

Resolution 1 Ohm

Accuracy $\pm 2\%$

Physical

Enclosure 6.0" x 13.5" x 12.0"
High Impact Plastic, UL 94 V-0
Face - Lexan, Back Printed

Weight 12.5 lbs

Electrical

Power Supply External Universal supply
12 VDC Output

Voltage 83 to 264 VAC

Frequency 47 to 63 Hz

Battery Sealed Lead Acid
6 VDC, 7.2 AH

General

Display LCD Graphical 256 x 64 Pixels,
Backlight

Ventilation Internal Fan, variable speed
Over temperature protected
Fan rotor sensor

Oscilloscope Output Isolated (uncalibrated), BNC
Connector

Setup Memory EEPROM, All Parameters

Memory Retention 10 years w/o Power

Operating Range 15 to 35 Degrees C

Storage Range -40 to 60 Degrees C

Humidity Limit 90% Non-Condensing

Connections Oscilloscope: BNC
Communications: USB, DB9
Loads: 4mm safety sockets



Optional External Load Precision Power Resistor
(See Page 9 for a listing of available values)

Internal Load Values NOT Exactly what YOU need?

The ESU-2300 allows for the use of External or a combination of Internal & External Load Resistors to cover ranges outside the provided Internal Load Range. Setup Parameters allow the user to tell the unit about External Loads. This ensures the continued accurate measurement & display of power.