

QA-ES Series II

ANALIZADOR DE ELECTROBISTURÍES



Descripción

QA-ES Series II analiza las unidades de electrocirugía rápidamente y de forma precisa.

Un amplio rango de resistencias de carga ofrece al usuario 128 cargas seleccionables, incluyendo cargas muy bajas para la prueba de muchas unidades de electrocirugía actuales.

Una precisión de $\pm 2\%$ de la lectura desde 20mA garantiza unos resultados fiables de fuga de alta frecuencia. Con capacidad para realizar automáticamente la prueba de distribución de potencia en tan solo 1 minuto, el QA-ES trabaja rápido de forma que los técnicos ganan tiempo.

Un módulo de software Ansur QA-ES permite al usuario crear y realizar automáticamente pruebas, captura datos y produce informes con el PC fáciles de leer.

Características principales

- Medición automática de distribución de potencia, incluyendo potencia, corriente, tensión pico a pico (solamente con carga) y factor de cresta
- Salida para osciloscopio
- Mediciones de fuga de alta frecuencia con precisión del $\pm 2\%$ de la lectura
- 128 cargas internas de prueba seleccionables por el usuario desde $10\ \Omega$ hasta $5200\ \Omega$
- Salida para interruptor de pedal para activación de la unidad de electrocirugía bajo prueba
- Módulo de software Ansur QA-ES para la automatización de protocolos de prueba
- Amplia pantalla
- Puerto RS-232 e interfaz Centronics para impresora

Tel: 935 862 747
 Fax: 935 862 749
 E-mail: info@stelectromedicina.es
 Web: www.stelectromedicina.es

ST - Electromedicina, s.a.
 c/ Atenas, nº 23-25, Nave 2
 Pol. Ind. Cova Solera
 08191 - RUBI
 (Barcelona) - SPAIN

Specifications

Generator output

Continuous operation

Continuous measurement of power, current, peak-to-peak voltage (closed load only), and crest factor

Single operation

Single measurement after the set delay time of the ESU output of power, current, peak-to-peak voltage (closed load only), and crest factor

Power distribution

Automatic measurement of power, current, peak-to-peak voltage (closed load only), and crest factor through a user-selectable load range

RF leakage current

Provides connections and load configurations to measure HF leakage from both grounded and isolated equipment

RECQM

Test the "return electrode control quality monitoring" using the QA-ES internal loads

Modes of operation

Manual or remote controlled (via Ansur)

Measurement

True RMS value of applied waveform

RMS bandwidth

30 Hz to 10 MHz (-3 dB) for instrumentation only
30 Hz to 2.5 MHz (-3 dB) with loads

Low frequency filter

100 Hz filter to avoid low-frequency disturbance or interference

Current

20 mA to 2200 mA

Current accuracy

20 mA to 2200 mA $\pm 2\%$ of reading

Load resistance

10 Ω to 2500 Ω in step of 25 Ω (@ dc)
2500 Ω to 5200 Ω in step of 100 Ω (@ dc)

Additional fixed load

200 Ω 400 W for 30 s; max 15 % duty cycle

Crest factor

The higher of the two peak voltage measurements is used for computation

Range: 1.4 to 16 (V peak/V rms).

Foot-switch output

The foot switch output can be used to trigger the electrosurgical unit.

Peak-to-peak voltage

0 kV to 10 kV (closed load only)
accuracy: $\pm 10\%$

Note: Measurement is taken between the active and dispersive electrodes with closed load only.

Oscilloscope output

5 V/A uncalibrated, 100 mA RF current
minimum input

Ansur QA-ES plug-In

Remote Control

All functions and tests in QA-ES may be performed from the PC.

User-programmable test sequences

Allows unlimited numbers of test sequences with user-programmable templates and test limits. These tests include power distribution test, output test, HF leakage, and RECQM verification.

Storage and recall

Protocol formats and data may be stored, recalled, printed out, or transferred.

Temperature

Operating: 15 °C to 35 °C (59 °F to 95 °F)

Storage: 0 °C to 50 °C (32 °F to 122 °F)

Display

LCD graphic display

Alphanumeric format

8 lines x 40 characters

Graphic mode

240 x 64 pixel matrix

Display control

5 F-keys, enter, cancel, control knob, and an encoder

Data input/outputs

Parallel printer port and bidirectional RS-232

Power

115/230 V ac; 48 Hz to 66 Hz, 35 VA

Housing

Metal case

Dimensions (WxDxH)

39.5 cm x 34.2 cm x 13.2 cm
(15.6 in x 13.5 in x 5.2 in)

Weight

9.8 kg (21.6 lb)

Ordering Information

Model

2649769: QA-ES Series II 115 V Electrosurgery Analyzer – US

2651725: QA-ES Series II 230 V Electrosurgery Analyzer – SCHUKO

2770445: QA-ES Series II 230 V Electrosurgery Analyzer – UK

2770450: QA-ES Series II 230 V Electrosurgery Analyzer – AUS

3096390: QA-ES Series II 100 V Electrosurgery Analyzer – JPN

Optional accessories

2461794: Carrying Case

2461802: Ansur Test Software, QA-ES Plug-in License

2461993: Data Transfer Cable, RS-232

2716059: Calibration Manual

2523266: Clamp, Crocodile Style, Grip C, Black

2523275: Clamp, Crocodile Style, Grip C, Red

Standard accessories

2716044: Manual on CD

2716032: Manual Hard Copy

2772171: ESU-Dispersive Safety Lead

2772180: ESU-CQM Safety Lead

2772209: ESU-Jumper Safety Lead

County Specific Power Cord

2826194: Test Lead with Stackable Plugs

1903307: Test Lead Set with Retractable Sheaths

1610159: Sure-grip Large Alligator Clip Set

About Fluke Biomedical

Fluke Biomedical is the world's leading manufacturer of quality biomedical test and simulation products. In addition, Fluke Biomedical provides the latest medical imaging and oncology quality-assurance solutions for regulatory compliance.

Today, biomedical personnel must meet the increasing regulatory pressures, higher quality standards, and rapid technological growth, while performing their work faster and more efficiently than ever. Fluke Biomedical provides a diverse range of software and hardware tools to meet today's challenges.

Fluke Biomedical Regulatory Commitment

As a medical device manufacturer, we recognize and follow certain quality standards and certifications when developing our products. We are ISO 9001 certified and our products are:

- FDA Compliant
- CE Certified, where required
- NIST Traceable and Calibrated
- UL, CSA, ETL Certified, where required
- NRC Compliant, where required

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Fluke Biomedical

PO Box 9090, Everett, WA 98206-9090 U.S.A.

Fluke Biomedical Europe AS

Vegamot 8, N-7048 Trondheim, Norway

For more information, contact us:

In the U.S.A. (800) 648-7952 or

Fax (425) 446-5629

In Europe/M-East/Africa +47 73954700 or

Fax +47 73954701

From other countries +1 (425) 347-6100 or

Fax +1 (425) 446-5629

Email: sales@flukebiomedical.com

Web access: www.flukebiomedical.com

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