GMC-I Messtechnik GmbH

Südwestpark 15
90449 Nürnberg
GERMANY

Fon: +49 911 8602-111 Fax: +49 911 8602-777

www.seculife.eu **www.gossenmetrawatt.com** **info@gossenmetrawatt.com**

Printed in Germany . Subject to change without notice . 1/11.3-337-274-03 / 01.2011

GOSSEN METRAWATT
Safety through Competence

SECULIFE ELECTROSURGICAL | ESXTRA ANALYZER

OUR TEST INSTRUMENTS GIVE YOU EXTRA SAFETY.

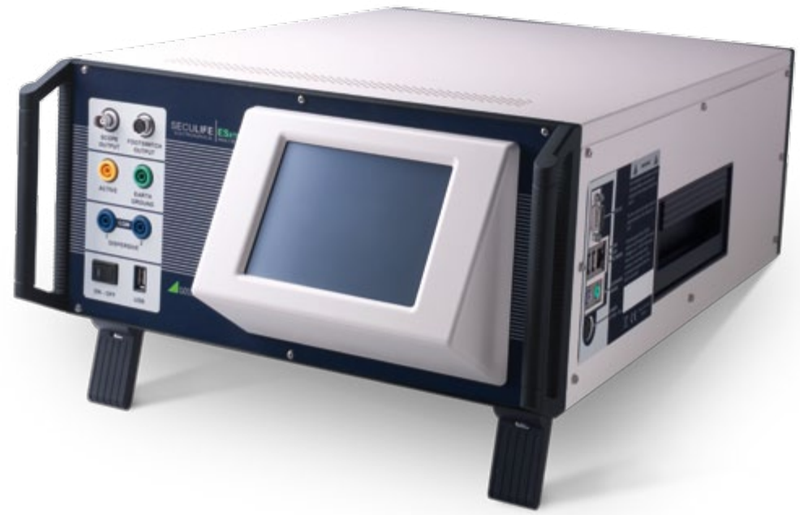
GOSSEN METRAWATT
Safety through Competence

SECULIFE®
PREMIUM CLASS TESTING DEVICES FOR MEDICAL TECHNOLOGY

SECULIFE ESXTRA
ELECTROSURGICAL ANALYZER

ELECTROSURGICAL ANALYZER

THE SECULIFE ES XTRA REPRESENTS A TOTALLY NEW STANDARD IN FULL-FEATURED ELECTROSURGERY ANALYZERS, WITH FEATURES THAT HAVE NEVER BEEN SEEN BEFORE. IT OFFERS UNPRECEDENTED FEATURES AND CAPABILITIES, ALL IN A SELF-CONTAINED "CONVENTIONAL" ELECTROSURGERY ANALYZER.



Using internal precision non-inductive test loads in the range of 0 Ω to 6400 Ω in a previously unavailable 1 Ω increment, the Seculife ES Xtra offers biomedical engineers, service engineers and manufacturers compatibility. Just in case, we have included the capability to add an external load, guaranteeing 100% test load requirment compatibility for years to come.
Using a RF current range of 2 mA to 7000 mA RMS (power range of 500 Watts RMS), the Seculife ES Xtra surpasses all other current and previously available analyzers in measurement range. The calibration quality accuracy of our new analyzer shatters all previous barriers seen with other so-called full-featured analyzers and opens the door for end-users to perform test procedures in the field as well as calibration procedures on even the newest generators from leading manufacturers all with unprecedented precision and accuracy. Features like automated power load curve tests, with multiple power steps per load setting, and automated user-definable test squences, with an unlimited quantity of steps, each step having virtually unlimited ASCII text description capability, further set the new Seculife ES Xtra in a class of its own. You can even program an automated REM/ARM/CQM and/or RF leakage test report in the Seculife ES Extra.

The utilization of state-of-the art technology and the strict adherence to the electrosurgery industry's standard of RF current measurement (instead of voltage measurement) helps ensure electrosurgery generator manufacturer acceptance of readings taken with the Seculife ES Xtra, not only on conventional "continuous output" waveform generators, but also on "pulsed output" waveform generators.
The new Seculife ES Xtra is in a class of its own, and its real time operating system offers virtually unlimited expansion capabilities in the future that make it the ONLY logical choice for customers looking for a full-featured analyzer.

FEATURES

- ¬ Industry Standard RF Current Measurement
- ¬ Continuous & Pulsed Output Waveform Compatible
- ¬ Embedded Real-Time Operating System with ¼ VGA Color Touch Screen Display
- ¬ Displays Up to 15 Different Measurement Parameters with User Selectable and Definable Screens
- ¬ Internal Precision Test Loads From 1 Ω to 6400 Ω in 1 Ω Increments
- ¬ External Test Load Compatibility
- ¬ Automated Power Load Curves with Multiple Power Settings Per Load Setting
- ¬ Automated User-Definable Testing Sequences
- ¬ Print Test Reports to RS232 or USB Printer
- ¬ USB (3), RS232, and Ethernet Communication Ports
- ¬ External Keyboard and Mouse Compatible Via Dedicated Ports
- ¬ Automatic or Manual Activation of ESU Generator During Power Load Curve Tests
- ¬ Remote Communications Capability with ESU Generators
- ¬ REM/ARM/CQM Testing Via 500 Ω Adjustable Load in 1 Ω Increments
- ¬ RF Leakage Current Measurement
- ¬ Capture, Store, Print RF Waveform

TECHNICAL DATA

MEASUREMENTS

A/D Resolution	14 Bits
A/D Speed	64 MSPS
Bandwidth	50 kHz - 10 MHz
Measurement Accuracy	1% Reading
Current Range	2.0 to 700.0 mA RMS (Low Range) 20 to 7000 mA RMS (High Range)
Current Resolution	0.1 mA RMS (Low Range) 1 mA RMS (High Range)
Power (Watts) Range	500 Watts
Power Resolution (Watts)	0.1 Watt
Crest Factor Range	1.4 to 500
Crest Factor Resolution	0.1
Input Voltage Range	0.20 to 70.00 mV RMS (Low Range) 20 - 700.00 mV RMS (High Range)
Voltage Resolution	0.01 mV (Low Range) 0.1 mV (High Range)
mV Peak/Peak-to-Peak Range	0.0 to 1.0
mV Peak/Peak-to-Peak Resolution	0.1

PHYSICAL / ELECTRICAL

Screen Size	5.7" QVGA 18 bit color touch screen
Setup Memory	EEPROM, All Parameters
Memory Retention	10 Years w/o Power
Operation Range	15 to 30 Degrees C
Storage Range	-40 to 60 Degrees C
Construction	Enclosure - Aluminum Face - Lexan, Back Printed
Size	7.8" H x 15" W x 22.5" D
Weight	31 lbs
Connections	Input: I/O 4mm Safety Jacks 3xUSB, 1xSerial, 1xEthernet, 1xPS/2 Keyboard/Mouse Output: 1xBNC Scope Hypertronics 25-pin Footswitch connector
Power Supply Adapter	Input: Universal 100-240 VAC, 50-60 hz Output: 12 VDC

INTERNAL LOAD SELECTION

Internal Load Range	0 to 6400 ohms
Internal Load Accuracy	1% Non-inductive
Internal Load Power Ratings	1 ohm: 25W 2 ohm: 50W 4 ohm: 100 W Remaining Loads: 225W
Load Bank Duty Cycle	10 Seconds on, 30 Seconds off
Load Cooling	Dual 120mm Variable Speed DC Fans

EXTERNAL LOAD SELECTION / LOAD BANK SPECIFICATIONS

Internal Load Range	0 to 6400 ohms
External Load Resolution	1 ohms
Internal Setup/Load Selection Relays	10kV, 5A rated Reed Relays

SECULIFE®
PREMIUM CLASS TESTING DEVICES FOR MEDICAL TECHNOLOGY