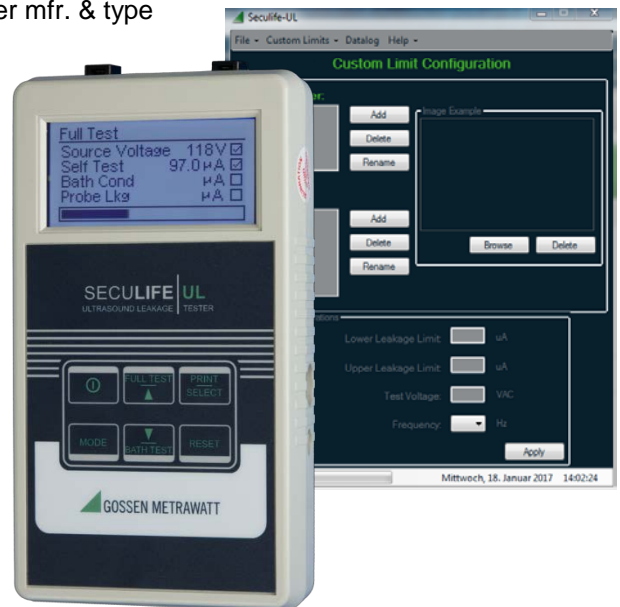


## SECULIFE | UL Leakage Current Tester for Ultrasound Transducers

3-349-975-03  
1/8.17

- Tests the upper & lower leakage current limits per ultrasound mfr. specifications
- Programmable Test Limits based on ultrasound transducer mfr. & type
- Auto ranging for enhanced accuracy over entire range
- Range 0.5 to 500  $\mu$ A
- Large graphic display w/ backlight
- User-selectable Test Limits
- 1% F.S. range accuracy
- Press one button for full system test
- Selectable Pass/Fail or Numerical Test Results
- Flash Programmable, Field Upgradeable
- RS232 Interface
- Test results printable with optional printer
- On-board storage for up to 99 Test Records
- Audio-Visual Test Status Notification
- Meter mode for extended measurement periods
- Custom Limit setting (Included in Software)
- Test report function (Included in Software)
- Datalog with storage of 99 test records
- PC Utility Software for Configuration Setup & Remote Control
- Programmable meter timer
- Programmable meter source (challenge) voltage and frequency
- User-Selectable Challenge (Test) Voltage (90-275 V AC) & Frequency (50 or 60 Hz)
- On-Board Clock & Calendar Function for Date/Time Stamp of Test Records
- Compatible with Dale Technology® Dale800 and Fluke Biomedical® ULT 800 ultrasound transducer adapters and dual conductivity probe



The SECULIFE UL Series is specifically designed to test the electrical safety of all types of diagnostic ultrasound transducers, totally independent of the ultrasound machines on which they are typically used. Although the SECULIFE UL can be used on virtually any type of ultrasound transducer, it is especially recommended in the testing of TEE (Transesophageal Echocardiography) transducers prior to each use. All TEE probes must be tested for electrical leakage before each use according to the IAC regulations. The SECULIFE UL tests the integrity of the outer insulation barrier of the transducer as well as the capacitive leakage currents that exist. The SECULIFE UL Series is the most advanced instrument of its kind on the market today and adds a totally new dimension to diagnostic ultrasound transducer electrical safety testing. With

features and functionality that far surpasses competitive products from other manufacturers, the SECULIFE UL is easy to set up and use. Operating modes include a simple PASS/FAIL mode as well as a QUANTITATIVE mode that offers actual readings. You can print test results to an optional printer

### Scope of delivery

- 1 SECULIFE UL (M695X)
- 1 Information-CD
- 1 Calibration certificate
- 1 Battery, 9 V DC
- 1 Powersupply (Universal 90-264 V AC)  
Z695M 10 V DC

# SECULIFE | UL

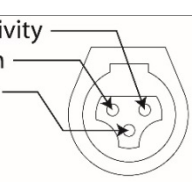

## Leakage Current Tester for Ultrasound Transducers

### Specifications

Size	18,5 x 10,08 x 4,57 cm
Enclosure	ABS Plastic
Weight	< 0,68 kg
Frontplate	Lexan / Black printed
Operating Range	15 to 30 °C
Storage Range	-40 to 60 °C

General	
Display	LCD-Graphic Screen 128 x 64 Pixel
Backlight	YES
RS232	YES
Battery	9 V Lithium, 1200 mAh (ANSI/NEDA 1604LC or equivalent)
Power consumption	On < 300 mA Off < 250 µA

### Functions

Test procedures	
Source Test	YES
Circuit Test	YES
Bath Conductivity Test	YES
Probe Leakage Test	YES
Specification	
Source Voltage	90 to 275 V AC, ±1% FS
Leakage Current	0.50 to 10.00 µA, ± 0.5 µA 10 to 250 µA, ±1% FS
Conductivity current	250 to 500 µA, ±1% FS 0.5 to 500 µA, ±1% FS
Memory	
Setup Memory	EEPROM, All Parameters
Memory Retention	10 years w/o power
Connections	
Connections	<p>Pin 1 - Conductivity</p> <p>Pin 2 - Common</p> <p>Pin 3 - Leakage</p>  <p>Note: As Viewed From Unit Exterior</p>
RS 232 Communications *	<p>RS232</p>  <p>NOTE: As Viewed from Unit Exterior</p>

\* Communication Adapter Cable (Option) Art. No. 20-41361



## Leakage Current Tester for Ultrasound Transducers

TRANSDUCER MANUFACTURER	MODEL	ADAPTER PART NUMBER
Acuson / Siemens	V5M (TEE), V7M (TEE), EV8-C4, etc For Acuson Sequoia Ultrasound Systems	ULT-PA-10
Acuson / Siemens	ALL 260-pin Transducers	ULT-PA-12
Acuson / Siemens	ALL 156-pin Transducers	ULT-PA-13
Aloka	UST-934N/945BP, ASU-32-3-M, ASU-32-WSJ, UST-556/5512, UST-5514DTU	ULT-PA-22
ATL / Philips	HP/Agilent/Philips 21311A, 21369A, 21378A, 21381A. For HP Sonos 4500, 5500, 7500, and Imagepoint. For ATL HDI 1500,3000,3500, and 5000	ULT-PA-14
ATL / Philips	T6210, L7-4 and similar 260-pin transducers with bellhousing	ULT-PA-24
GE	GE Logiq 3, 5, 7, 9 and GE Vivid 3, 5, 7, 6T, 9T	ULT-PA-16
GE	LogiqBook Probes - GE VIVID I 6T, 9T, etc.	ULT-PA-25
GE	YMS/RT	ULT-PA-27
GE	4C-D, 6VT-D, Voluson E8, Vivid E9	ULT-PA-30
Hitachi	HI VISION 900, 5500, 6500, 8500 EUB-2000, EUB-525, EUB-405 Plus	ULT-PA-21
Philips	Philips iE33 and iU22 diagnostic TEE - S7-2 (TEE), S7-3t (TEE), S3-1, C8-4v, C9-5, et all with bellhousing, Mindray DC8	ULT-PA-17
Philips / HP	HP/Agilent/Philips 21202A, 21364A, 21365A, 21366A, 21367A	ULT-PA-18
Philips	Cx50 series, X7-2T, EPIQ 7c	ULT-PA-19
Sonosite	ICT7-4, ITC8-5, C60, L38/10-5, TEEEx For Sono-site Titan and Micromaxx Ultrasound Systems	ULT-PA-11
Terason	ALL	ULT-PA-31
Toshiba	Acuson/Toshiba for use with Acuson/Siemens XP, Aspen, Capasee, 3-needle guide C3 Transducers; ATL 3.5 DFT Transducers; Toshiba PSF-37HT and F series Transducers For Toshiba SSH-140A, SSA-270A, and 340A systems	ULT-PA-20
Zonare	E9-4	ULT-PA-29
All Manufacturers	Universal Pen Style (For small surface area testing)	ULT-PA-23

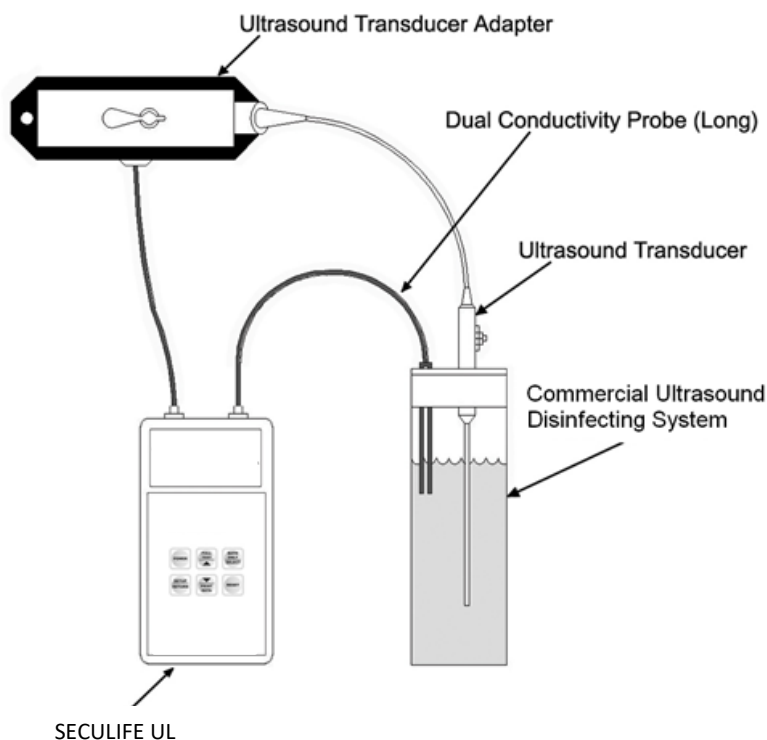
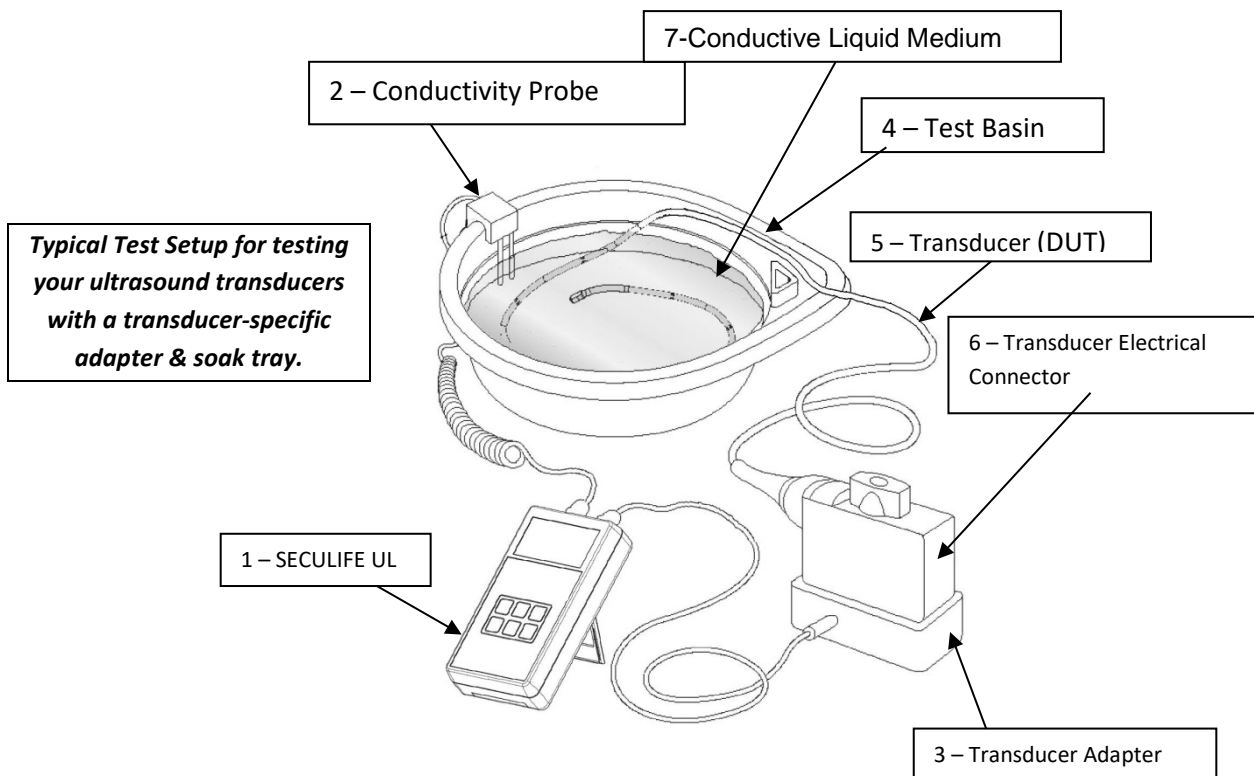
The following is the minimal equipment needed to test the electrical safety of ultrasound transducers:

- 1) SECULIFE UL Ultrasound Transducer Electrical Leakage Tester
- 2) Dual Conductivity Probe (See list)

ULT-PC-10	DUAL CONDUCTIVITY PROBE (Short)
ULT-PC-15	DUAL CONDUCTIVITY PROBE (Medium)
ULT-PC-20	DUAL CONDUCTIVITY PROBE (Short & Long)
ULT-PC-25	FOR USE WITH GUS CLEANING SYSTEM
ULT-PC-30	DUAL CONDUCTIVITY PROBE (Flexible)

- 3) Ultrasound Transducer Adapter (See list on top)
- 4) Test Basin (BC20-42200)

# SECULIFE | UL Leakage Current Tester for Ultrasound Transducers



Edited in Germany • Subject to change without notice • A PDF version is available on the Internet