

SECULIFE | UP Digital Ultrasound Meter

3-349-977-03
1/2.17

- Resolution 50 mW
- Measurement range 0 to 30 Watts
- Frequency range 0,5 to 10 MHz
- Measurement of pulsed power
- Measurement of continuous power
- Readout in watts
- Readout in grams
- Battery powered
- Line-powered (external power adapter)
- Digital liquid crystal display
- Automatic zeroing
- Automatic stabilization
- Five point certification
- NIST traceable



Ultrasound watt meters have been used worldwide since 1977 and are a widely accepted standard for documenting the power output of medical transducers. The Model SECULIFE UP Ultrasound Power Meter was developed to test therapeutic and diagnostic transducers.

The compact and light weight Model meets all the requirements of a portable test instrument with the reliability and proven performance of the SECULIFE U-Series. The SECULIFE UP uses a 12,7 cm diameter, 8,9 cm high test tank.

The most reliable and repeatable means of measuring ultrasound power is by the radiation force method. The transducer to be tested is centered above a 45° air-backed cone target in de-gassed water. The coupling is made to a precision balance capable of resolving ± 0.15 watts. When acoustic energy is applied to the cone, the resultant force is

directly proportional to the total radiated power. The test tank is lined with sonic absorbent rubber to prevent acoustic reflection. The balance is programmed to convert milligram magnitude forces direct to a readout in watts with good resolution. Measurement accuracy of the power meter can be verified by placing a calibrated weight on the cone's support arm. (The supplied 1 gram calibration weight equals 14 watt)

Scope of delivery

- 1 SECULIFE UP (M695Y)
- 1 Information CD
- 1 Calibration Certificate
- 1 Carrying Case
- 1 Powersupply (Universal 90-264 V AC)
Z695M 10 V DC

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Digital Ultrasound Meter

Specifications

| | |
|--------------------|-----------------------------------|
| Size | 21,6 x 30,5 x 22,2 cm (H x D x W) |
| Carrying Case | Polyethylene |
| Tank Lining | 0,5 Inch (12,7 mm) thick Neoprene |
| Weight | 5 kg |
| Frontplate | Lexan / Back printed |
| Operating Range | 15 to 30 °C |
| Storage Range | -40 to 60 °C |
| Battery | Quantity 4, AA (IEC LR6) Alkaline |
| Battery Eliminator | 12 V, 500 mA, 90-264 V AC |
| Display | 6 digit, Backlight LCD |



Functions

| Ultrasonic Power Measurement | |
|--------------------------------|----------------------------------|
| Power Range | 0 to 30 W |
| Resolution | +/- 50 mW |
| Minimum Detectable Power Level | 50 mW |
| Accuracy | +/- % + One Count Reading |
| Digital Filter | 2.5 seconds Integration |
| DUT Operating Frequency | 0.5 to 10 MHz |
| DUT Maximum Transducer Size | 4.00 Inches (101.6 mm) |
| Test Medium | Degassed Water @ 24.0 +/- 3.0 °C |

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