

Radiation Force Balance (RFB-2000)

Designed specifically for easy Ultrasound Power measurements on medical devices, the RFB-2000 requires little maintenance and no complex correction factors, and is compliant with regulatory requirements including AIUM-NEMA UD-2, UD-3, IEC 61161, and with associated IEC standards. Automation assures reliable means to validate Acoustic Output measurements as recommended by AIUM-NEMA document UD-2.

Features

- Transparent, top-loading configuration
- No membrane or coupling gel required
- Unaffected by water evaporation
- Can be user-calibrated to standard masses
- Automatic temperature correction
- Accommodates variety of targets
- Short tank configuration to accommodate large transducers
- Selectable averaging to optimize measurement time and precision
- Automatic and manual measurement modes
- Automated logging of configuration, cal and measurement data
- Three means for automatic control of user equipment
- Includes calibration certificate based on acoustic power
- USB interface, optically isolated, Win 7 compatible



RFB-2000

Optional Kits:



Vacuum Lid for in-tank degassing (RFB-VLK)



Cone target kit for Physiotherapy Up to 30W (RFB-CTK)



Brush target for HIFU measurements Up to 100W (RFB-BTK)



Short Tank Configuration (left) to accommodate large transducers

Technical Specifications

- Power ranges: 1 mW* to 2W with standard absorbing target
Up to 30W with cone target (RFB-CTK) and up to 100W[†] with brush target (RFB-BTK)
- Display Resolution: > 4 digits
- Typical measurement uncertainty*: < $\pm 5\%$ at 95% confidence level
- Measurement cycle time: adjustable from 4s (default) to 120 s
- Maximum beam diameter: 5 cm
- Low Frequency Limit: 1MHz (usable at lower frequency with decreased accuracy)

* Extended averaging may be required, depending on local vibration and power level

[†] Depending on beam parameters

Optional Accessories:

- RFB-CTK - cone target
- RFB-BTK – brush target
- RFB-PMP - water-compatible vacuum pump (specify voltage)
- RFB-MSK1X1 – Mask Kit – for Thermal Index (1cm x 1cm window)

Simple operation for Diagnostic, Physiotherapy or HIFU devices

