



●
PRECISE, ACCURATE
 An industry standard for independently
 verifying prescribed patient dose

IVB 1000 WELL CHAMBER

● **CONFIDENCE IN BRACHYTHERAPY SOURCE CALIBRATION**

The IVB 1000 Well Chamber can be used for intravascular, HDR and LDR brachytherapy. It is similar to the HDR 1000 Plus but has an active length which is four times longer, making it ideal for long source trains.

● **WHY PERFORM INDEPENDENT VERIFICATION?**

AAPM TG 56 & TG 40, IAEA TRS 398, and many manufacturers of brachytherapy seeds recommend independent verification of their source strengths. Centers in the U.S. may also be forgoing reimbursement income by not performing independent verifications. CPT code 77370 provides reimbursement for on-site calibration of brachytherapy seeds. To receive the reimbursement a facility is required to have a NIST traceable calibration for instruments like the HDR 1000 Plus or IVB 1000 Well Chambers for on-site calibrations.

Features

Superior Functionality

- An exceptionally long 100 mm sweet spot, unmatched in other chambers, accommodates long source trains and wires
- Calibrates individual and multiple isotopes
- Outstanding versatility, use one chamber for many isotopes
- Source holders available for most existing sources

Assurance is Confidence

- Satisfies NRC requirements and TG-60 quality assurance requirements for IVB source strength verification
- Precise and accurate calibration of HDR and LDR Iridium, Iodine, Palladium, Cesium, and Strontium brachytherapy source activities

IVB 1000 WELL CHAMBER (REF 90009) SPECIFICATIONS

ACTIVE VOLUME 475 cm³

CONNECTOR Two lug triax BNC (standard)
TNC, Type M, or BNC + Banana (optional)

RANGE 10 U to 80 MU 0.01 mCi to 20 Ci

CABLE 3 ft, 1 m

BIAS VOLTAGE ± 300 volts, typical

LEAKAGE Less than 50 fA

STABILITY 0.2% (Reproducibility over 2 years)

RESPONSE ± 0.3% over 100 mm at center of axis, typical

SENSITIVITY

| SOURCE | Current to Air Kerma Strength (U=1uGym ² /h) | Current to Apparent Activity |
|--------------|--|------------------------------|
| HDR Iridium: | 2.2 pA/U | 9.0 nA/Ci |
| Cesium: | 2.1 pA/U | 5.9 nA/Ci |
| LDR Iridium: | 2.4 pA/U | 9.5 nA/Ci |
| Iodine: | 4.3 pA/U | 5.5 nA/Ci |
| Palladium: | 2.3 pA/U | 2.6 nA/Ci |

Approx. 38.5 nA/Gy/s for ⁹⁰Sr/⁹⁰Y

ACCESSORIES Case (REF 50026) included
(4) Interlocking 1" lead rings (REF 70025)
Carrying case for Comprehensive Calibration System
(REF 70012)

DIMENSIONS Height: 10.2 in, 25.9 cm Insert Diameter: 1.4 in, 3.5 cm
Diameter: 4 in, 10.2 cm Insert Height: 8.8 in, 22.4 cm
Weight: 8.0 lbs, 3.6 kg

Specifications subject to change without notice.

ORDERING
INFORMATION

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