

# HDR 1000 PLUS WELL CHAMBER



PRECISE, ACCURATE

An industry standard for independently verifying prescribed patient dose



## ● CONFIDENCE IN BRACHYTHERAPY SOURCE CALIBRATION

The HDR 1000 Plus Well Chamber is an air-communicating chamber, so there is no inaccuracy due to an undetected gas leak as in a pressurized chamber. The HDR 1000 Plus is ideal for low dose rate and high dose rate brachytherapy. Source holders are available for most existing sources.

## ● 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.

This product is available through:

**JRT** Associates 800-221-0111

STANDARD IMAGING 



## Features

### International Acclaim

- HDR 1000 Plus has been performance validated in more than 50 scientific presentations and is used by Primary and Secondary Radiation Standards Laboratories throughout the world.

### Assurance is Confidence

- Precise and accurate calibration of HDR and LDR Iridium, Iodine, Palladium, Cesium, and Strontium brachytherapy source activities. Calibrates individual and multiple sources.

### Wide Range of Uses

- Outstanding versatility, use one chamber for many isotopes
- Source holders available for most existing sources Including: Cesium, Iridium, HDR Iridium, LDR Iridium, Iridium Wire, Iodine, Palladium

## HDR 1000 PLUS WELL CHAMBER (REF 90008) SPECIFICATIONS

**ADCL CALIBRATIONS** HDR <sup>192</sup>Ir and/or LDR radionuclides from various manufacturers as requested

**ACTIVE VOLUME** 245 cm<sup>3</sup>

**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** ± 0.5% over 25 mm at center of axis

### SENSITIVITY

| SOURCE       | Current to Air Kerma Strength<br>(U=1uGym <sup>2</sup> /h) | Current to Apparent Activity |
|--------------|--|------------------------------|
| HDR Iridium: | 2.1 pA/U   | 8.6 nA/Ci                    |
| Cesium:      | 2.0 pA/U   | 5.6 nA/Ci                    |
| LDR Iridium: | 2.3 pA/U   | 9.1 nA/Ci                    |
| Iodine:      | 4.3 pA/U   | 5.4 nA/Ci                    |
| Palladium:   | 2.1 pA/U   | 2.4 nA/Ci                    |

**A<sub>ion</sub>** 0.9996, typical

**ACCESSORIES** Case (REF 50004) and source holder of choice included  
Wall mount accessory (REF 70007)  
(5) Interlocking 1" lead rings (REF 70125)  
Carrying case for any Comprehensive Calibration System (REF 70012)

**DIMENSIONS** Height: 6.1 in, 15.6 cm Insert Diameter: 1.4 in, 3.5 cm  
Diameter: 4 in, 10.2 cm Insert Height: 4.8 in, 12.1 cm  
Weight: 6.1 lbs, 2.7 kg

*Specifications subject to change without notice.*



[sourceholders.standardimaging.com](http://sourceholders.standardimaging.com)

**widest variety** of source holders for use with the HDR 1000 Plus and IVB 1000 Well Chambers



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