



**Features:**

- ▶ Hemispherical geometry for easy placement and alignment
- ▶ High impedance for minimum drift
- ▶ High output – 32nC/Gy typical
- ▶ Excellent output uniformity vs. gantry angle
- ▶ Outstanding stability – <0.1%/kGy at 6MV photon beam
- ▶ Available in various water equivalencies for photons and electrons
- ▶ Tygon®-sheathed cable eliminates kinking

Modality	Model (neg)*	Optimal energies	Buildup g/cm <sup>2</sup>	Buildup material	Color code
Photons	40-1120	1-4 MV	1.0	aluminum	blue
	40-2120	6-12 MV	1.8	brass	gold
	40-3120	15-25 MV	3.0	brass	red
Electrons	40-5120	4-25 MeV	0.3	acrylic	silver
	40-6120	70 keV- <sup>60</sup> Co	0.1	none	black

\* Positive polarity detectors available upon request.

**Specifications**

- Detector type: ..... n type diode
- Detector size: ..... 0.8 x 0.8mm<sup>2</sup>
- Sensitivity: ..... 32nC/Gy
- Impedance: ..... >200MΩ @ 24°C, 10mV reverse bias
- Output polarity: ..... negative
- Output stability: ..... 2% loss of sensitivity at 1000Gy, 10MeV electron beam
- ..... 0.1% loss of sensitivity at 1000Gy, 6MV photon beam
- Temp. coefficient: ..... 0.5%/°C
- Construction: ..... hemispherical, 12.7mm flat bottom
- Radiation hardening: ..... special technique
- Cable: ..... 2m low-noise coax, 2.5mm thick with Tygon® sheath
- Connector: ..... Coax BNC male (Lemo optional)

**Accessories**

- 2BM-F10 ..... 10m coax extension cable, with BNC connectors (Lemo connector optional, available in custom lengths in 1meter increments)
- 2BF-LM ..... Adapter, coax BNC female, Lemo male
- 2BM-LF ..... Adapter, coax BNC male, Lemo female

**EquiDose®II Diode Detectors**

The EquiDose®II diode detectors are a new generation of solid state detectors exhibiting superior characteristics. Radiation damage is extremely low, with detectors typically retaining better than 94% of their original response after 15,000 exposures of 2Gy, a total of 30,000Gy. Axial directional response variation is typically less than 1%, ±90° from perpendicular. A low temperature coefficient minimizes sensitivity variation due to patient heat transfer during treatment.

Each photon EquiDose®II detector responds most effectively over one of three energy ranges. When used within its stated energy range, a calibrated detector will register a dose approximately equal to that expected at dmax. They operate in shorted junction mode and require no bias voltage.

*EquiDose®II diodes are compatible with TheraPro, EquiLyzer, Sentinel 2, 22D, VeriDose, Rainbow, PDM and IVD.*