

# Delta<sup>4</sup> Discover for Varian



## Replaces Pre-Treatment Verification by introducing Efficient Online Monitoring and In-vivo Dosimetry

The innovative Delta<sup>4</sup> Discover transmission detector provides confidence and patient safety based on real time measurements. Its outstanding accuracy and ease of use assures the highest efficiency in your patient QA.

The ultra-thin Delta<sup>4</sup> Discover detector uniquely gives you:

- Highest resolution: independent verification of the MLC leaf position with sub-millimeter accuracy
- Uniquely low increase in skin dose to the patient fl 1%\*
- Beam attenuation very small, fl 1%\*, no change in characteristics and no need to recommission TPS data
- All parameters are obtained independent (logfile-free) from therapy machine
- Very high accuracy in dose measurements, accuracy better than 1.5%, very sensitive to finding errors (gamma at 1.5%, 1.5mm) better than 99%
- Maintained clearance. The detector fits within the anti-collision zone resulting in no reduced clearance
- Integrated dose delivered to the patient
- Interaction-free and verifies 3D dose and DVH in patient anatomy
- Light field and ODI visible

\*6MV, 10 x 10 cm field



**Delta<sup>4</sup>**  
by ScandiDos

*Innovative and Efficient QA*

[www.delta4family.com](http://www.delta4family.com)

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## Technical Specifications for Varian TrueBeam:

### Accuracy

**Dose measurements in prescription point** Within 1.5%

**MLC Positioning Determination (static MLC within the area covered by the detector)** 95% within 1 mm

### Beam Attenuation

**Beam Attenuation** About 1%<sup>1</sup>

**Increase of skin dose** About 1%<sup>1</sup>

### Detectors

**Total Number** 4040

**Diameter** 1 mm (disc shaped)

**Spacing** 2.5 mm\* (along MLC trajectories); 5 mm\* (transverse to MLC trajectories)

**Area Covered** 195 x 250 mm<sup>2</sup>\*

**Type** p-Si

**Sensitivity Decrease (6MV beam)** 1% / 25kGy

### Weight, Dimensions – Varian Version

**Dimension** Diameter: 790 mm (Disc shaped); 23 mm from collimator surface

**Weight** 8.7 kg without batteries (0,5kg / battery)

<sup>1</sup>6MV, 10 x 10 cm field

\*When projected down to isocenter plane

### Communication and Compatibility Matrix

**Compatible with:** Varian linacs with Millenium MLC™ and HD MLC, OPTIMIZED FOR Millenium collimator (5 mm spacing between detector arrays across the MLC)

**Reduced Linac Clearance When Mounted** It is within the zone of Varian's laser guard collision detection system which means that the clinical clearance is maintained. Varian TrueBeam: 6 mm from the top of the accessory pins, 23 mm from collimator surface

**Linac's Light Field** Delta<sup>4</sup> Discover can be extracted so that the linac's light field is completely visible

**Optical Distance Indicator** The optical distance indicator is visible both when Delta<sup>4</sup> Discover is extracted and in the normal position

**Battery Operational Capacity** >6 hours; Rechargeable Li Ion battery – Charger is included

Technical specifications are subject to change without notice  
™ Delta<sup>4</sup> Discover is a trademark of ScandiDos AB (publ)  
® TrueBeam is a registered trademark and Millenium MLC is a trademark of Varian Medical Systems, Inc.

## Delta<sup>4</sup> Discover and Varian Compatibility

	Compatible with Delta <sup>4</sup> Discover	ADI Connection	Compatible Versions
Truebeam Truebeam STx	Yes*	Varian configuration needed	2.0 2.5 2.7
Edge VitalBeam	Yes*	Not available	2.0 2.5 2.7
Clinac HE Unique Trilogy	Custom coding Interface needed	Varian configuration needed. Proper firewall needed (MICAP)	C-Series 9.1 4DITC v.13

\*Not compatible with HyperArc.



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