

# Tomodose™

## Tomotherapy® Beam QA Made Easy

Two dimensional detector array for quality assurance of a Tomotherapy® Hi-Art® machine.

### The Tomodose Advantage

- Only array designed specifically for Tomotherapy Hi-Art
- Ideal for routine and component replacement QA
- Measure entire beam in a single measurement
- Sets up in minutes
  - Single cable connection
  - No warm up required
- PROFILER™ based software
  - Fast and accurate comparison and analysis

### Hardware

- 223 SunPoint Diode Detectors
  - Highest sensitivity (32.0nC/Gy)
  - Smallest size (0.64mm<sup>2</sup>)
- Ten measurement axes for both X and Y direction
  - Single 530mm X axis
  - Nine 98mm Y axes

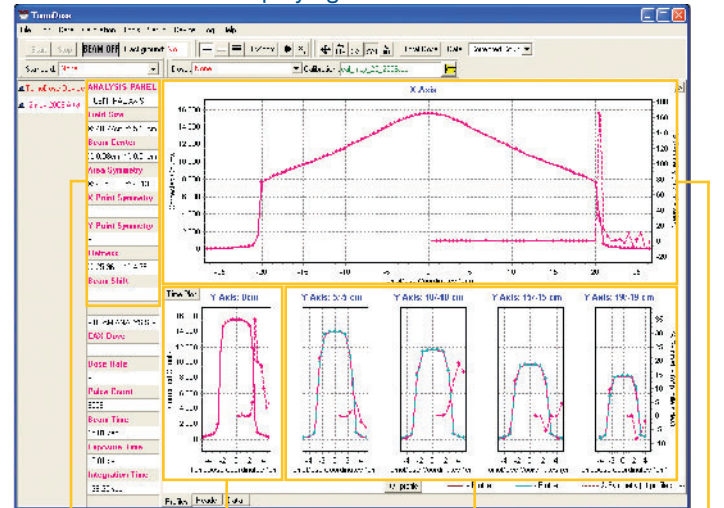
### Software

- Measure output, symmetry, flatness, field size, penumbra, beam center, and more...
- Analyze and compare up to 15 profiles at once
- Water tank data import
- Merge function along X or Y axis to obtain 1mm spacing
- Instantaneous dose rate plot
- True accessibility to raw data
  - No "black box"

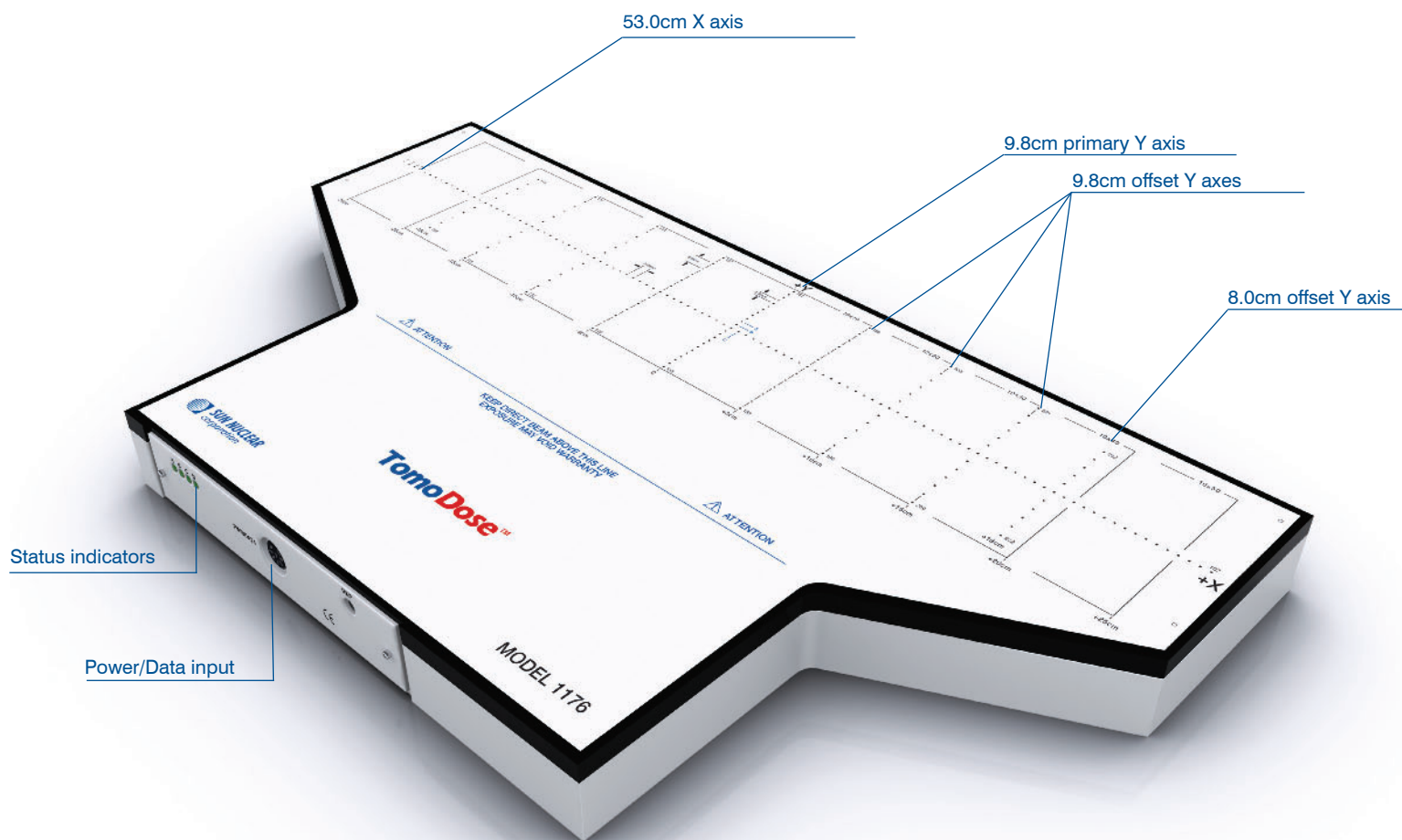
Tomodose inside the Hi-Art bore



Tomodose software displaying X and Y Axes



Automatic Analysis      Y: 0mm      Y: off-Axis      X



Detector type:	SunPoint Diode Detectors
Detector quantity:	223 total on X and Y
Detector spacing (mm):	X Primary: 5.0 Y Primary: 4.0 Y Offset: 8.0
Field size (cm):	53.0 x 9.8
Array length (cm):	X: 53.0 Y: 9.8 (8.0 at $\pm 19.0$ )
Y axes offset (cm):	$\pm 5.0$ , $\pm 10.0$ , $\pm 15.0$ , $\pm 19.0$
Inherent buildup ( $\text{g}/\text{cm}^2$ ):	1.0
Inherent backscatter ( $\text{g}/\text{cm}^2$ ):	2.3
Active detector area ( $\text{mm}^2$ ):	0.64

Detector volume( $\text{cm}^3$ ):	0.000019
Detector sensitivity (nC/Gy):	32.0
Detector stability:	0.5%/kGy at 6MV
Maximum dose rate limit (Gy/min):	56.0
Operating system:	Windows 2000, XP 32-bit, or Vista 32-bit
Dimensions / Weight:	25.6 x 52.0 x 6.0cm / 5.0kg
Number of connection cables:	Single power/data cable



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