PROVEN TECHNOLOGY IMPROVED

The DoseView 3D is a new 3-axis water phantom for performing comprehensive linear accelerator beam commissioning and quality assurance measurements quickly, accurately and intuitively.
Communicating the legacy of our world-renowned QA products, such as Exradin Ion Chambers and electrometers, the DoseView 3D provides customers with the quality and integrity they demand in a 3D water scanning phantom. Save time and improve data quality at a price that won’t strain your budget.

The DoseView 3D’s rigid, one-piece cast aluminum frame and reliable components maintain accuracy even after thousands of repetitions. The lift and reservoir cart streamlines setup, use and storage of the phantom. It comes complete with automatic fill and drain functionality, as well as a variety of precision positioning features. The DoseView 3D’s intuitive software is equipped with robust data export functionality, programmable automatic acquisition scan queuing and a suite of data processing tools that facilitate efficient scanning for both novice and expert users.

“We have commissioned both Monaco Treatment Planning System and Oncetra Treatment Planning System. We are satisfied with the system accuracy, precision and overall performance of the DoseView 3D Dosimetry System.”

Ganeshkumar Patel
Chief Medical Physicist and RSO
Robust Construction Provides Foundation for Accuracy, Consistency
Manufactured with a rigid, one-piece cast aluminum frame and stainless steel leadscrews, the DoseView 3D provides a durable platform for repeated QA testing. This construction ensures consistent measurement accuracy within ±0.1mm per axis.

Precise, Three-Point Leveling
The DoseView 3D’s three leveling screws are mounted above the phantom’s scanning volume, making it easy to fine-tune leveling even when the phantom is filled with water.

Fewer Cables, Faster Setup, Better Data
A fast-acquisition electrometer and motion controller are mounted on board the DoseView 3D, reducing the length of detector cables required for testing. This lessens settling time and opportunity for cable leakage, streamlining setup. Only one cord is needed to power the entire phantom.

Durable, Accurate Stepper Motors
The DoseView 3D’s 5 stepper motors maintain superior precision over the phantom’s lifetime, minimizing degradation even after 30,000 repetitions.

Convenient, Wireless Pendant
An intuitive wireless pendant allows for easy vault operation without restricting movement around the phantom and linear accelerator. The pendant’s audible and visual cues and backlit display makes configuring and controlling the DoseView 3D a straightforward process for any user. Fine-tune positioning with 0.1mm per-press step mode.

Thorough, Automatic Phantom Drain
The automatic drain feature and advanced suction drain lets users empty the DoseView 3D while cleaning up the rest of their QA materials. The advanced suction drain ensures that you return to an empty tank, not a quarter-inch of standing water.

Keep cables organized during testing
Cable carriers keep the motor connections compact and unobtrusive throughout the entire range of motion.

Reference Detector Holder
This modular detector holder can be used in 2 length configurations to accommodate a wide range of field sizes. A carbon fiber support tube prevents reference detector vibration during scanning.

Sample Detector Holder
A series of included holders can be positioned either horizontally or vertically while maintaining a consistent origin location using the Detector Alignment System.
Fewer variables, while taking measurements using a Cartesian system, allow for more reliable results.

High standards for reliable data
The DoseView 3D uses a Cartesian coordinate system, which enables it to accurately set the isocenter to any point within the tank, regardless of the tank location. Because the CAX is set independently, it avoids the intrinsic rotational error seen in cylindrical tanks with Polar coordinate systems. This makes the DoseView 3D the optimal choice for even the smallest stereotactic fields.

Expedites Accurate Set Up with the Detector Alignment System
Innovative detector-holder system places the center of all detectors at the same position relative to the water's surface, allowing users to swap detectors without resetting isocenter/origins. Initial setup is performed with the crosshair alignment jig which provides ample surface area and fiducials to aid in matching to the ODI and/or room lasers. This bracket system is compatible with Exradin Ion Chambers and supports chambers and diodes from most other manufacturers. This system ensures faster setup time and provides confidence in accurate leveling and beam center positioning.

Automatically find beam center
Once leveling is performed, the DoseView 3D determines the center of a radiation field by locating the field edges using an ion chamber or diode. This test can be performed at multiple depths to identify any issues with system leveling and/or gantry alignment.

Variable step size acquisition
The DoseView 3D can be programmed to move in varying step sizes throughout a scan. Implement tighter steps toward the penumbra to account for increased variability without significantly increasing overall scan time.
EASY TO USE SOFTWARE MODULES

Scan Acquisition
2. Prior to setup, create a set of scan routines in Auto Acquisition mode and save them for use in later testing. Scan sets can be implemented and organized on a TPS or custom basis to streamline commissioning and QA procedures.
3. Acquire depth dose and profile data in single setup operation.
4. Resume scans and preserve data, even if the beam shuts off.
5. Auto sampling and minimal range selection takes the guesswork out of electrometer setup.

Table Generation
- Quickly create PDD, TAR and TPR/TMR data tables for printing or exporting, using CAX data acquired from the DoseView 3D or manually entered values.

Scan Processing
- The Scan Processing Module features a comprehensive suite of tools facilitating data manipulation, including:
  - Mirror Data: Replace one half of a profile with a mirrored copy of the other half.
  - Average Data: Average scan points at equal distances from the central axis to create a new symmetrical profile.
  - Concatenate Data: Combine two half scans together to form large profiles.
  - Smooth Data: A suite of algorithms allows removal of unwanted noise or anomalies from a scan file.
  - Point Edit: Edit the relative dose level of any point in a profile or CAX scan.
  - Profile Center: Re-center profile data based on the data on either side of the central axis.
  - Surface Shift: Shift the Z-axis of profile and/or CAX data for effective point of measurement corrections.
  - Normalize Data: Re-normalize data to a specific point or global maximum.
- DoseView 3D always preserves raw measurements, ensuring no valuable data is accidentally overwritten.

Database Management
- Facilitates browsing, editing, re-organization and printing of existing scan files, making pertinent data readily available. Scan data is stored in a hierarchy of machine → energy → SSD so specific files are always easy to find.

Treatment Planning System Export
- Transition scan data to a variety of treatment planning systems, including:
  - Varian Eclipse
  - Philips Pinnacle
  - Elekta XiO
  - Elekta Monaco
  - Prowess Panther
  - Elekta Oncentra
- All supported TPS systems are included at no additional charge.
Fully Integrated with Lift and Reservoir in One

The DoseView 3D’s cart contains both an electronic lift mechanism and 60 gallon (265 liter) water reservoir, resulting in hassle-free storage and setup. Additionally, a convenient storage area holds the power supply and other accessories. The lift and pump are powered by a single power cable, and a power pass-through cable allows convenient connection to the water phantom.

Auto-Fill, Auto-Drain Operations

Automatic tank-fill and tank-drain functionality allows users to prep the DoseView 3D while taking care of other setup tasks. The water phantom’s advanced suction drain ensures that the tank is thoroughly drained upon completion of testing.

Extensive Adjustments Capabilities

The Precision Positioning Platform provides an ideal medium for maneuvering the DoseView 3D. This added flexibility allows subtle X and Y axis movements up to ±12.5mm, phantom rotation of ±1°, and positive engagement at 10°, 45°, and 90° intervals. Achieve consistent detector orientation during in-plane, cross plane and diagonal scans.

Efficiency Lift Cart

An alternate, portable lift cart is also available. The electric lift table has a capacity of 900 pounds and is capable of over 15 inches of vertical travel.

Customized Auto-Queues

Customized auto-queue scan sets are implemented specific to your linear energies, field sizes, depths and other parameters at no cost for each customer. This time-saving feature will save 8+ hours of work when setting up scans. Your DoseView 3D arrives ready to scan. Customers also have the flexibility of choosing wizard-based or manual setup options to define their own scans. Custom scans created in Auto-Acquisition mode can be saved and recalled for later testing. These sets can be implemented, edited, and organized on a TPS or custom basis to streamline commissioning and QA procedures.

24/7 Support

Standard Imaging’s acclaimed customer service and support ensures an easy transition of the DoseView 3D into your QA workflow and will guide you through any issues that may arise in the future. Standard Imaging also provides 24/7 phone support for DoseView 3D in USA.

For more information on warranties and additional maintenance and support packages please contact your Standard Imaging Account Manager or regional distributor.

Visit www.standardimaging.com or call 800-261-4446 for more details.