



## **THERAVIEW FEATURES & TECHNICAL SPECIFICATIONS**

### THERAVIEW FEATURES

#### ***Image Detection***

- Scintillator screen
- High-quality digital extremely low noise C<sup>3</sup>D camera
- Large field of view - 280 x 280 mm
- Telescopic detector design with motorized movements
- Universal interface to most linear accelerators

#### ***Image Acquisition and Display***

- 1024 x 1024 x 12 bit high resolution acquisition
- Highly sensitive TheraView C<sup>3</sup>D camera [|-40°|Cooled CCD] with optical data transmission
- Acquisition modes: Single, Double, and Treatment sequence exposures, Dosimetry
- Set-Up Images: displayed immediately and stored automatically
- Treatment Sequence: acquisition and display of one image per second

#### ***Image Processing Enhancement***

- Edge enhancement
- Window/level and polarity inversion
- Automatic histogram equalization
- 2x magnification
- Image flip and rotation
- Distance measurements
- Grid overlay
- Image annotation

#### ***Image Comparison***

- Online analysis of field size, MLC, and beam shape
- Patient position verification
- Automatic retrieval and display of reference images

- Previous portal images may be used as a reference image
- Reference image input by DicomRT image (requires optional DICOM module), or bitmap transfer
- Reference image input by film scanner (Vidar or flatbed), CT (sim), and CR device
- Side-by-side image display

### ***Image Management***

- Automatic storage of images onto hard disk or network
- Online image review and processing
- Patient information annotated to images
- DicomRT image compatible
- Hardcopy and archive options, also networked

### ***System Operation***

- Mouse/menu graphical user interface
- Streamlined operation maximizes patient throughput
- System self-diagnosis at start-up
- Radiation room work procedures are unaffected
- Transparent Windows® Network Connectivity

### ***System Orientation***

- IEC 61217 compliant

## TECHNICAL SPECIFICATIONS

### ***System Components***

- Image detector with video camera
- Digital camera controller with optical 600Mb link
- Workstation
- Mouse and keyboard
- Modem or internet for Tele-diagnostics

### ***Workstation Configuration***

- Intel Premium Pentium 4, minimal 2.4 GHz CPU
- 512 MB RAM, minimal 100 GB data hard disk

- 19" TFT color monitor
- Five built in I/O ports: UTP 100MB/1 GB, RS-423 serial ports for external modem and control
- Writable DVD system for 4.7GB backup

### ***Image Detector***

- 400 X 400 mm scintillator screen
- Video camera resolution: 1300 x 1030 x pixels 65535 levels of gray
- Detection resolution at scintillator 0.78 mm (binned)
- Contrast detectability: 1%
- Image matrix optimized for display: 512V x 512H x 8-bit

### ***Power Consumption***

- 115/230V, 50/60 Hz, 300 watts max

### ***Approvals***

- 510(k), CSA, IEC 10601-1, UL544, CE, MOHW

### ***Optional System Components***

- Folding detector for maximal patient clearance
- TheraView Information Core System (TICS) for backup, archiving, and DicomRT
- Dye sublimation thermal printer
- Low cost postscript or HP laser printer
- Film digitizer for simulator image input
- Flatbed scanner 12 bit, 304, 8 x 431, 8 mm (12. x 17.)
- Independent review workstation client
- Optional DICOM Export
- Standard graphical format input (.bmp, .jpg, .tif)
- Background http server for programming and review