



TOMOTHERAPY[®] TomoHDA[™] SYSTEM COMMERCIAL DESCRIPTION





TOMOTHERAPY[®] TomoHDA[™] SYSTEM

GOLD STANDARD IN IMRT

Versatile, efficient and effective for the range of radiation oncology patients

CLINICAL EXCELLENCE

- Enables planning and delivery of highly sculpted dose distributions
- Facilitates seamless daily CT image guidance for precise patient positioning, margin reduction and adaptive planning

PATIENT FOCUSED

- Provides customized and consistent treatments for <u>every</u> patient
- Spares more normal tissue, helping to reduce side effects

IMPROVED ECONOMICS

- Facilitates scheduling in conventional time slots
- Enables patient treatments not possible on conventional linacs
- Allows fast and flexible treatment planning for each patient
- Improves quality assurance efficiency





TomoTherapy°

Description	Detailed description
TomoTherapy® H™ Series Treatment System Gantry	 TomoTherapy H Series Treatment System Gantry The gantry includes: a large 85 cm aperture for patient comfort and accessibility, the radiotherapy treatment linear accelerator, a primary collimator to define slice width and Multileaf Collimator (MLC) to further define the treatment beam, a high resolution detector system (used for CTrue[™] image acquisition) which is coplanar with the beam, a cooling system and electronics to control these components. Three (3) beam slice widths, 5 cm, 2.5 cm and 1.0 cm are standard.
TomoTherapy H Series Treatment System Configuration • Enclosure Assembly with Positioning Control Panels (PCP) • Integrated Noise Eliminating Intercom System • Status Console • System Power Distribution Unit (PDU) • Laser Positioning System	 TomoTherapy HDA Treatment System Configuration The TomoHDA[™] treatment system is a completely integrated radiation therapy platform offering treatment planning, CT image guidance and delivery of intensity modulated radiation therapy. The following major components are included: • Enclosure Assembly with Positioning Control Panels (PCP) The gantry enclosure system includes two large 12 inch (Approx. 30 cm) integrated touch-screen Positioning Control Panels which enable electronic control and synchronization of the Patient Couch and the 3-D Laser positioning system used to align the patient for a given TomoTherapy treatment protocol. The PCPs allow high-fidelity position adjustments of 0.1 mm in X, Y and Z directions and a hands-free patient unload feature. The gantry enclosure also includes a power control panel. • Integrated Noise Eliminating Intercom System The Noise Eliminating Intercom System facilitates clear two-way communication between the clinician and the patient, utilizing Digital Signal Processing technology, throughout the TomoTherapy imaging and treatment process. The Noise Eliminating Intercom System comprises a desktop console with "push to talk" function for placement at the TomoTherapy Operator Station, a "hands-free" speaker for the treatment room and an external microphone, for suspension from the ceiling either behind or in font of the TomoTherapy treatment system gantry. The desktop console and treatment room speaker are connected via standard CAT-5 data cable. • Status Console A status console is included which is used to operate the various modes of the TomoTherapy treatment system. • System Power Distribution Unit (PDU) The PDU provides distribution of site power to various TomoTherapy components and electronics. The PDU also provides electrical isolation. • Laser Positioning System The system configuration includes stationary green lasers for virtual isocenter and movea
High Performance Couch for TomoTherapy H Series with Medical Intelligence indexing system	 High Performance Couch for TomoTherapy H Series Treatment System with Medical Intelligence indexing system The High Performance Couch provides sub-millimeter accuracy and precision in point-to-point and translational positioning. Clinical workflow is enhanced with ergonomically designed dual Couch Control Keypads mounted to each side of the couch. The Couch Control Keypads allow motorized patient position modification in the X, Y and Z directions with simple, single-handed operation. The custom patient couch has a high strength carbon-fiber top with an indexing system designed to accommodate immobilization systems from Medical Intelligence.



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 TomoHDA[™] System Software and Computing Hardware Kit System Software and Additional Features Treatment System Software and Software License TomoHelical[™] Treatment Mode TomoEDGE[™] Dynamic Jaw Operator Station Couch Control OIS Connect[™] - One (1) Client License Data Services Package – DICOM Export Remote Software Solutions – Base Configuration (Includes two client licenses Remote Planning and 2 client licenses TomoPortal[™]) Tomo Quality Assurance (TQA[™]) Essentials Computing Hardware / Data Server Assembly Two Planning Stations Operator Station VoLO[™] Optimization Cluster TomoTherapy H[™] Series User Documentation Package (in electronic format) 	 TomoHDA System Software and Additional Features System Software and Additional Features Treatment System Software and Software License TomoHelical Treatment Mode TomoEDGE Dynamic Jaw Operator Station Couch Control OlS Connect 1 - One (1) Client License Data Services Package – DICOM Export Planned Adaptive³ Remote Software Solutions - Base Configuration plus an extra seat (Incl. 2 client licenses Remote Planning and 2 client licenses TomoPortal) Tomo Quality Assurance (TQA) Essentials Computing Hardware Data Service Assembly Two Planning Stations Operator Station Operator Station TomoHelical Treatment Mode The TomoHelical Treatment Mode TomoHelical Treatment Mode The TomoHelical Incet the set on the treatment plan that defines dose goals and constraints for target and avoidance structures, the livee of modulation for the plan, as well as the fractionation schedule. During treatment delivery, the linear accelerator completes multiple 3/00" rotations around the patient while he rotate a treatment tolume is variable depending upon couch height. Region of treatment tealer the delivery to the system, initiated by a single turn of the operator console key A maximum radiation treatment field length of 135 cm (transverse diameter) x 135 cm (IongUnital) for typical patient set-up. Actual treatment volume is variable depending upon couch height. Region of treatment used is determined by the planning CT image field of view (FOV). Provided the FOV is 80 cm or less and all patient natorwy is present in the planning image, the TomoDirect Treatment Molaning is completed rap



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	 Data Services Package - OIS Connect™ - One (1) Client License The OIS Connect "software provides the ability to interface a TomoTherapy treatment system to a compatible Oncology Information System (OIS) (see note 2). The OIS Connect software facilitates greater integration of the TomoTherapySM treatment system in the radiation oncology department, by: 1. Allowing scheduling of TomoTherapySM treatments on the OIS 2. Providing automatic capture of TomoTherapy procedures on the OIS 3. Aiding in charge capture and billing (where applicable) 4. Aiding in integrating TomoTherapy treatments into patients' electronic medical records, via the OIS. The OIS Connect software is based on DICOM RT Worklist communication, as specified in DICO Supplements 74 and 96. Note 1: Each OIS Connect license applies to one (1) TomoTherapy treatment system and is valid for the life of the purpose of enabling the OIS Connect functionality for additional TomoTherapy treatment systems include "MOSAIG*" from IMPAC Medical Systems, Inc. and "ARIA*" from Varian Medical Systems, Inc. Please contact your IMPAC or Varian representatives for information on pre-requisites, required OIS software versions, and/or additional licensing requirements. DICOM Export software allows the following DICOM sbjects to be sent from the TomoTherapy treatment system to 3rd party systems and clinical/research databases: DICOM-RT Dase DICOM-RT Plan Accuray maintains compliance with current published DICOM standards and detailed information is available in our DICOM Conformance Statement. Accuray is not responsible for incompatibility of 3rd party systems and/or software Software Solution, securely and easily provides TomoTherapy user fully functional operation of the TomoTherapy Planing Station application and plan modification as hould there be discovery of unacceptable deviations between the previous plan and verificat on for single or multiple treatment fractions. It further enables contour gen



Description	Detailed description
	Note 1: Client hardware is not included. The flexibility to use a laptop, desktop, or tablet PC client platform remains the choice of each licensed user. Purchased client hardware platforms must meet the minimum specifications provided by TomoTherapy Incorporated (outlined below): • Microsoft Windows XP, Windows 7, or Mac OS X 10.6 • Minimum screen resolution of 1280 x 1024 pixels • Color quality should be set to Highest (32 bit) • Intel Core 2 processor or equivalent • Citrix® ICA Windows Desktop Receiver (DesktopReceiver.msi) version 11.1; or Mac OS X Desktop Receiver version 11.2 • Anti-virus software approved by facility IT department must be running • Network bandwidth of at least 3Mbps IMPORTANT: If you do not set the resolution to 1280 x 1024 pixels, the Remote Software Solutions system cannot be used as designed. Note 2: Client license packages are sold solely on a per TomoTherapy [®] System-basis. Licenses cannot be transferred, assigned, or shared across multiple TomoTherapy systems. Note 3: Options to purchase up to two (2) additional Remote Planning licenses and up to six (6) additional TomoPortal Remote Viewer licenses are available. • TomoTherapy Quality Assurance (TQA'') Essentias • Oster authenticated access to TQA database • Calendar for QA tracking and scheduling • Air scan • System diagnostics/monitor • Basic Dosimetry Module • Optimizer/Data Server Assembly </th
	standard. This distance may be extended up to 1,000 m with the addition of P/N 100700-000 Planning Station Extended Network Option.



Description	Detailed description
	 Operator Station: One TomoTherapy[®] Operator Station, which connects to the H[™] Series database and provides control of CTrue[™] MVCT imaging, patient treatment and quality assurance delivery, plus basic Record & Verify functionality. The Operator Station is provided with a color printer capable of printing CTrue images and treatment data, plus an LCD monitor, keyboard & mouse plus required cables. Note: The Operator Station may be located up to 100 m from the treatment delivery system. High performance VoLO[™] Technology is a new plan optimization system for the TomoTherapy platform. It features high-end graphics processing unit (GPU) hardware paired with redesigned software that takes full advantage of the GPU's parallel processing abilities to make treatment planning faster, more flexible and more interactive, making optimal TomoTherapy treatments available to more patients. With VoLO Planning, dose calculation and optimization are performed at unbelievable speed. In just a few minutes, plans can be optimized, finalized and saved, ready for quality assurance and delivery. This includes plans for large, complicated treatment volumes, or simple cases – in fact, any case with which you are presented. VOLO FEATURES GPU hardware implementation using hundreds of parallel processors Efficient 3D representation of the beam and patient geometry Innovative dose calculation algorithms that combine speed with accuracy VoLO PLANNING BENEFITS Ultra-fast plan optimization – just minutes from start to finish, even for clinically complex cases Interactive monitoring of results and fine-tuning of plan parameters during the optimization process No need for a non-interactive pre-planning step High performance configuration includes two nodes and enables planning of up to five cases at one time, with further increased efficiency. This ismultaneous usage includes both dose calculation an
Power Kit 220 240V/60Hz International	
Power Kit 220 240V/50Hz International	
Power Kit 110 120V/60Hz International	



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System Installation Options: ***Installation services are not included for Distributor orders; installation is the responsibility of the Distributor.***	
Standard Installation for the TomoTherapy® Treatment System	 Standard Installation for the TomoTherapy Treatment System Includes: Pre-installation Site Planning and Project Management Services Installation and Acceptance testing Completion of Acceptance Test Procedure (ATP) and System handover
Hardware Options	
Additional Planning Workstation – International Configuration – Qty 1	 Additional Planning Workstation – International Configuration – Qty 1 One additional Planning Workstation for connection to the standard TomoTherapy treatment system network, for international customers. The additional Planning Workstation provides increased flexibility for the TomoTherapy treatment system and greatly enhances workflow efficiency. The Planning Workstation includes the TomoTherapy planning software and Data Management System (DMS) application software and therefore provides: Treatment plan definition and management Initiation of plan optimization Treatment plan review Delivery Quality Assurance (DQA) Patient data archiving/management functionality. Note 1: A maximum of three TomoTherapy Planning Stations (1 x Planning Station and 2 x Additional Planning Workstations) can be connected to the TomoTherapy treatment system network, in addition to the treatment system Operator Station.
Planning Station / Additional Planning Workstation Extended Network Option	This option should be selected for use with TomoTherapy Planning Stations or Additional Planning Workstations that are required to be located more than 100 meters (Approximately 300 feet) distant from the Optimization/Data Server cluster. The Planning Station / Additional Planning Workstation Extended Network Option includes: • Network switch • Fiber-optic transceivers • Optical fiber patch cables for connection of system components Note 1: Accuray recommends purchasing one (1) Planning Station / Additional Planning Workstation Extended Network Option, for each room where Planning Station(s) or Additional Planning Workstation(s) will be located. Note 2: The Extended Network Option allows the Planning Station(s) / Additional Planning Workstation(s) to be located up to 1,000 meters (Approximately 3,000 feet) away from the Optimization / Data Server cluster.
35KVA Power Conditioner System from Eaton Corporation	



Description	Detailed description
Configuration / Software Options for TomoHDA™	
HIS Workflow Connectivity	The HIS Workflow connectivity software option provides the ability to interface a TomoTherapy [®] treatment system to a compatible Hospital Information System (HIS). *Note: Please discuss with Product Marketing to determine if compatible with a specific HIS
Software License – StatRT™	Software License – StatRT The StatRT software package provides a clinically advanced, time-efficient solution for palliative treatments or a rapid start to a fractionated treatment plan. CT scanning, treatment planning and treatment delivery are all managed from the TomoTherapy Operator Station in a simple, direct workflow. The StatRT software employs similar dose calculation methods and helical IMRT delivery as the standard TomoTherapy treatment process, so treatments performed using the StatRT software maintain highly conformal, homogeneous dose distribu- tions and can cover a full range of patient presentations, from simple single lesions to complex multiple-lesion cases. Note: Each StatRT Software License applies to one (1) TomoTherapy treatment system and is valid for the life of the product. Transfer or resale for the purpose of enabling the StatRT option for additional TomoTherapy treatment systems is strictly prohibited.
Workstation Configuration Option for Network Data Storage	This feature allows patient archives created on the TomoTherapy treatment system to be sent to, or retrieved from, a storage location outside of the treatment system network.
DICOM Detector Signal Export	DICOM Detector Signal Export software option allows the user to export delivery information from the CT detectors of the TomoTherapy delivery system in a DICOM format. Note: This is only for research purposes at this time, please discuss with Product Marketing if a customer is interested in this item
Remote Software Solutions - Remote Planning - Third Client License Option	This option provides a third concurrent Remote Planning Client User License for the TomoTherapy system
TomoPortal™ License Upgrade Option for H™ Series – Two (2) to Four (4)	This option provides an additional two (2) TomoPortal user licenses for the TomoTherapy® treatment system, bringing the total number of TomoPortal concurrent user licenses included to four (4).
TomoPortal License Upgrade Option for H Series – Two (2) to Eight (8)	This option provides an additional six (6) TomoPortal user licenses for the TomoTherapy treatment system, bringing the total number of TomoPortal concurrent user licenses included to eight (8).



Quality Assurance (QA) and Delivery Quality Assurance (DQA) Options

Standard TomoTherapy QA Package (Required for new sites – 1 per site)	Includes 'cheese' phantom, solid water phantom and two calibrated mini ion chambers and one calibrated CT slice ion chamber.
TomoTherapy Quality Assurance (TQA™) Total Package	TOA Total Package TomoLink automated remote diagnostics and customer service access, includes: User authenticated access to TQA database Calendar for QA tracking and scheduling Air scan System diagnostics/monitor Basic Dosimetry Module Daily QA Module IEC-x Beam Alignment Module IEC-y Beam Alignment Module Field Width Profile Static Step Wedge Module Dynamic jaw field width test Dynamic jaw sweep test (Prerequisites: Must enable TomoLink and have 104940 (TomoTherapy Beam Measurement and QA Package (without water tank). See Price Book.
TomoTherapy Treatment System Beam Measurement & QA Package	This dosimetry package includes beam quality analysis hardware and software tools (Water tank, TomoElectrometer™, and TEMS) designed specifically for obtaining and analyzing radiation beam data from the TomoTherapy treatment system.
TomoTherapy Treatment System Beam Measurement & QA Package (without water tank)	This dosimetry package includes beam quality analysis hardware and software tools (TomoElec- trometer and TEMS) designed specifically for obtaining and analyzing radiation beam data from the TomoTherapy treatment system. Facilities often already owns their own water tank.
TomoElectrometer	8-Channel electrometer for acquiring ion chamber data. Compatible with most major ionization chambers.
Calibrated Mini Ion Chamber, and Interconnect Cable	



Description	Detailed description
Calibrated CT Slice Ion Chamber, Buildup Cap and Jig, and Interconnect Cable	
Interconnect Cable - 30 meters	For use with an ion chamber when an extension is required
Film Digitizer Kit	 Film Digitizer Kit The film digitizer kit is used to digitize films acquired on the TomoTherapy[®] treatment system for patient-specific quality assurance (also known as "Delivery QA" or "DQA"), machine quality assurance and acceptance testing procedures. This kit includes: 1 Vidar[®] DosimetryPRO[®] Advantage (Red) film digitizer and cables 1 personal computer, monitor, keyboard, mouse & TomoTherapy Film Analysis Software.
Film Analysis Kit for Existing Vidar DosimetryPRO Advantage or Flatbed Scanner	PC & Software Kit for Existing Vidar DosimetryPRO Advantage or Flatbed Scanner For centers that have an existing Vidar DosimetryPRO Advantage Film Digitizer (USB interface only), or a suitable flatbed scanner with TIFF file export capability, this kit includes: 1 Personal Computer, Monitor, Keyboard, Mouse & TomoTherapy Film Analyzer Software. Please provide existing DosimetryPRO Advantage Serial # The TomoTherapy Film Analysis software included in this kit is used for machine quality assurance and acceptance testing procedures, and may also be used in patient-specific quality assurance operations (also known as "Delivery QA" or "DQA").



TomoTherapy°



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