
Section 1 TrueBeam Performance Package

1.01 1 TrueBeam Package

Catalog #: MBS001001002

TrueBeam system configuration optimized for high-throughput IMRT & IGRT.

TrueBeam treats cancer anywhere in the body, including lung, breast, abdomen and head and neck. With sophisticated imaging and beam delivery, TrueBeam accurately and quickly targets and treats tumors while providing clinicians a high degree of confidence.

The TrueBeam Performance configuration brings together features optimized to help clinicians address IMRT and IGRT challenges. A combination of features and functionality have made this Innovative, Intelligent, and Intuitive system the most successfully launched linear accelerator in the history of Varian Medical Systems.

TrueBeam System 2.0 with the following features included:

- Small Vault Configuration offers all the benefits and advanced application of TrueBeam in a compact footprint
- Patient monitoring and safety with Motion View, LaserGuard II and Capacitive Collision Detection System on KV Imaging
- Treatment Techniques including IMRT, SRS/SBRT High Total Dose and Total Body treatment delivery
- KV Imaging with 2D planar kV and 3D CBCT Imaging
- 43x43 MV Imaging including Advanced MV Radiographic Imaging, Port Film Graticule and Portal Dose Image Acquisition with High Intensity Mode support
- Customer selectable up to 4 Photon Energies
- Customer selectable up to 5 Electron Energies
- Motion Management Interface

1.02 1 New Universal Baseframe 52" Fixed Floor

Catalog #: MBX001028001

1.03 1 Varian Volumetric Mod Arc Therapy Del

Catalog #: LRA001001002

Capability to simultaneously modulate aperture shape, dose rate, and gantry speed continuously through 360 degrees of gantry rotation, during an arc beam delivery.

FEATURES:

- Simultaneous modulation of MLC aperture shape, beam dose rate, and gantry rotation speed during arc beam delivery
- Supports dynamic jaw tracking and collimator rotation with supporting treatment planning system
- Provides IMRT-quality dose distributions in a single arc delivery in less than 2 minutes

Item	Qty	Product Description
1.04	1	6/6 MV (BJR 11/17) Catalog #: MBX001009003 40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min
1.05	1	10/10 MV (BJR 11/17) Catalog #: MBX001009005 40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min
1.06	1	18/23 MV (BJR 11/17) Catalog #: MBX001009008 40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min
1.07	1	6 MeV, 0-1000 MU/min Catalog #: MBX001011003 25 cm x 25 cm maximum field size, dose range range 0-1000 MU/Min
1.08	1	9 MeV, 0-1000 MU/min Catalog #: MBX001011005 25 cm x 25 cm maximum field size, dose range range 0-1000 MU/Min
1.09	1	12 MeV, 0-1000 MU/min Catalog #: MBX001011007 25 cm x 25 cm maximum field size, dose range range 0-1000 MU/Min
1.10	1	16 MeV, 0-1000 MU/min Catalog #: MBX001011009 25 cm x 25 cm maximum field size, dose range range 0-1000 MU/Min
1.11	1	20 MeV, 0-1000 MU/min Catalog #: MBX001011011 25 cm x 25 cm maximum field size, dose range range 0-1000 MU/Min
1.12	1	STD TRNG: TrueBeam On-Site Support Catalog #: IAB001001008 - Includes support for TrueBeam/Edge - Support is non-refundable and non-transferable - Offer is valid for 18 months after purchase On site follow-up review of the TrueBeam/Edge components to include imaging and motion management for support of patient treatment. The emphasis of this support is to ensure that the therapists that attended the TrueBeam Operations (on-site) training are able to operate the TrueBeam in a safe and effective manner in the clinical environment. PREREQUISITES: TrueBeam/Edge Operations (on-site) training

Item	Qty	Product Description
1.13	1	<p>INCL ED: TB201 TrueBeam for Physicists</p> <p>Catalog #: IEB001001007</p> <p>The following Education Course is included with the purchase of a TrueBeam/Edge.</p> <ul style="list-style-type: none"> - Includes Tuition and Materials for ONE person - Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals) - Training is non-refundable and non-transferable - Offer is valid for 18 months after installation of product <p>TrueBeam Physics and Administration</p> <p>TrueBeam Physics and Administration course is designed for those personnel responsible for the acceptance, commissioning and QA program development of the TrueBeam in the clinical environment. It is directed primarily towards Medical Physicists. It is recommended that the student attend the TrueBeam Physics and Administration course shortly before the installation of the TrueBeam.</p> <p>The course provides instruction of the basic delivery components, basic imaging components and a general overview of the motion management system components. Machine commissioning, calibration, QA and the responsibilities of Customer Acceptance Procedure (CAP) of the machine are included. The course subject matter is presented from a clinical use perspective. The primary emphasis is on the overall commissioning, calibration, and QA of the TrueBeam and its components. Extensive hands-on laboratory exercises are included.</p> <p>PREREQUISITES: None Length:4 days</p>
1.14	2	<p>INCL ED: TB101 TrueBeam Operations</p> <p>Catalog #: IEB001001008</p> <p>The following Education Course is included with the purchase of a TrueBeam/Edge:</p> <ul style="list-style-type: none"> - Includes Tuition and Materials for ONE person - Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals) - Training is non-refundable and non-transferable - Offer is valid for 18 months after installation of product <p>TrueBeam Operations is a course designed for those personnel responsible for the routine operation and clinical use of the TrueBeam. It is directed primarily towards Radiation Therapists. It is recommended that both students attend the TrueBeam Operations course shortly before clinical use and the commencement of patient treatments.</p> <p>The course provides instruction of the basic delivery components, basic imaging components and a general overview of the motion management system components. The course subject matter is presented from a clinical use perspective. The primary emphasis is on the overall understanding of the TrueBeam function and operation to include imaging and respiratory gating.</p>

Item	Qty	Product Description
		<p>Extensive hands-on laboratory exercises are included. The attendees of this class will be provided tools to allow them to instruct other clinical staff upon their return.</p> <p>PREREQUISITES: None Length:4 days</p>
1.15	1	<p>NLS: English Catalog #: ISB001002002</p>
1.16	1	<p>120 Multileaf Collimator Catalog #: MBX001019001 - Performance per RAD 10094 - High resolution leaf width of 5 mm (projected at isocenter) for central 20 cm - Leaf width of 10 mm (projected at isocenter) for outer 20 cm</p>
1.17	1	<p>25 Undrilled Block Trays Catalog #: MBS001002004 Undrilled MEDTEC trays, 0.635 cm thickness Starting shadow block kit</p>
1.18	1	<p>6X High Intensity Mode Catalog #: MBS001009004 40cm x 40cm maximum field size, dose rate range 400-1400 MU/Min</p> <p>Note: Portal Dosimetry (purchasable option) does not support High Intensity Mode</p>
1.19	1	<p>10X High Intensity Mode Catalog #: MBS001009006 40cm x 40cm maximum field size, dose rate range 400-2400 MU/Min</p> <p>Note: Portal Dosimetry (purchasable option) does not support High Intensity Mode</p>
1.20	1	<p>Low-X Imaging 2.5Mv Catalog #: MBS001005001 Low-X imaging at 2.5MV provides the benefits of higher soft tissue contrast when using MV beams to generate an image that is in-line with the treatment beam</p> <p>Pre-Requisites (not included in this quote) - TrueBeam System 2.0 Or - Edge System</p>
1.21	1	<p>Patient Accessory Verification System Catalog #: MBS001008001 Provides the capability to verify patient and accessory identification through use of a barcode scanning system. FEATURES: - One (1) Bar Code Scanner</p>

Item	Qty	Product Description
		- One barcode label printer
		Pre-Requisite: ARIA higher than v8.8 and lower than or equal to v11
1.22	1	<p>LAP Apollo Green Room Laser Kit</p> <p>Catalog #: MBS001022003 LAP Apollo Green Room Laser Kit</p> <p>FEATURES:</p> <ul style="list-style-type: none"> - 1 Apollo Green Remote Controlled Ceiling Crosshair Laser - 2 Apollo Green Remote Controlled Lateral Crosshair Lasers - 1 Apollo Green Remote Controlled Sagittal Line Laser
1.23	1	<p>Additional MotionView CCTV Camera System</p> <p>Catalog #: MBS001022005 Additional CCTV Camera Kit</p> <p>FEATURES:</p> <ul style="list-style-type: none"> - Two pan, tilt, zoom CCTV cameras - Two desktop, 81/4 inch LCD displays with built in camera controls - Adjustable viewing angle for patient privacy - Push button pan, tilt, zoom, and home position control <p>Prerequisites: Motion View must be selected or installed</p>
1.24	1	<p>Additional In Room Monitor</p> <p>Catalog #: LBS001040016</p>
1.25	1	<p>Power Cond., 3phase 50KVA, TrueBeam</p> <p>Catalog #: LBS001027003 Transtector 50KVA, 3-phase power conditioning unit, providing transient protection, line power regulation, and Input and Output circuit breakers for over-current protection. UL and IEC/CE certified.</p> <p>Available in all voltage configurations from 208 to 600 VAC and in 50 or 60 Hz for US and ROW applications.</p>
1.26	1	<p>Main Circuit Breaker Panel</p> <p>Catalog #: LBS001027005 General Electric Co. main circuit breaker panel, interfacing to a single power input feed from the facility Mains. Circuit breakers provide independent over-current protection for equipment at the console and in the treatment room. UL and IEC/CE certified.</p>

Item	Qty	Product Description
1.27	1	<p>Filtrine Water Chiller: HE Catalog #: OVI001007007 See Filtrine Specification sheet for details</p>
1.28	1	<p>Integrated IGRT Couch Top Catalog #: MBX001012004 Carbon fiber treatment couch top, free of metal or other radiation-opaque materials, thereby reducing imaging artifacts</p> <p>FEATURES:</p> <ul style="list-style-type: none"> - Clinically usable section of 120.0 cm - Supports patients up to 500 lbs (227 kg) - Indexed Immobilization® for compatible accessories - Head extension with interface for alternative patient immobilization and positioning device
<hr/> <p>Section 2 IsoCal Upgrade CL-IX TRILOGY #H294275</p> <hr/>		

2.01 1 IsoCal Upgrade
Catalog #: OBU001003004

IsoCal is a geometry calibration method that uses a phantom of known geometry in combination with an insert for the MV collimator to calibrate the MV and kV imaging systems. The general calibration process is to acquire a variety of MV images to determine the location of the treatment (radiation) isocenter. Then kV images are acquired and used to estimate the corrections needed to map all acquired kV images to the treatment isocenter. [If only MV imaging is installed on the accelerator, then only the first step of the process is performed.] One set of MV images necessary for the IsoCal calibration requires rotating the MV collimator by 270 degrees to identify the central axis of collimator rotation. This means that the Extended Head Rotation capability of the Clinac is a pre-requisite for IsoCal to function. The principle of operation of IsoCal is the following: By knowing the nominal location of the source, the nominal location of the x-ray detector, and the location and shape of the BB phantom, it is possible to predict where the projection of the BBs will appear in the acquired images. Any deviation between the predicted and the measured BB locations can be accounted by motion of the x-ray source, the x-ray detector or both, using IsoCal.

Includes IsoCal phantom, MV insert, supporting software, installation, and calibration for one linear accelerator.

Supports the On-Board Imager® kV imaging system.

OBI Pre-Requisites:

- OBI 1.5
- Exact Arm

Clinac Pre-Requisite:

- Extended Head Rotation

Item	Qty	Product Description
		OR
		<p>Supports PortalVision™ aS1000 and aS500II MV imagers.</p> <p>PortalVision Pre-Requisites:</p> <ul style="list-style-type: none"> Exact Arm MV Repositioning or PV Advanced Imaging for 4DITC on qualified HE Clinac <p>Note limitation for system types below:</p> <ul style="list-style-type: none"> - Clinac iX/2300 system serial # 5100 and above, or Silhouette configurations serial #940 and above. <p>Clinac Pre-Requisite:</p> <ul style="list-style-type: none"> Extended Head Rotation

Section 3 Flex-Credits for Add'l Applications Onsite Training Days

3.01 6 Varian Flex-Credit

Catalog #: PEC001001002

Varian FlexCredits are to be used for the purchase of Education courses provided by Varian Medical Systems at one of our Education Centers and/or onsite Applications Training. Entitlement training is not transferable for other courses, products or services and cannot be applied towards flex credits. FlexCredits cannot be applied towards the purchase other Varian products or services.

Varian FlexCredits expire 24 months after purchase. Flex credits are for the intended use of the training as listed below. The training is interchangeable for other Varian Education Courses and ApplicationsTraining, provided that the changes are equivalent to the total quantity of flex credits purchased.

Training Descriptions and Credits Required:

APPS TRNG: Additional Day - (Qty: 2, 3 credits each)

Additional training days are available for previously trained Varian products. One day is equivalent to 8 business hours.

Location: On-site training at Customer Facility
FlexCredits eligible

Item	Qty	Product Description
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Section 4		Flex-Credits for Add'l Education Courses (Tuitions Only)
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4.01 7 Varian Flex-Credit

Catalog #: PEC001001002

Varian FlexCredits are to be used for the purchase of Education courses provided by Varian Medical Systems at one of our Education Centers and/or onsite Applications Training. Entitlement training is not transferable for other courses, products or services and cannot be applied towards flex credits. FlexCredits cannot be applied towards the purchase other Varian products or services.

Varian FlexCredits expire 24 months after purchase. Flex credits are for the intended use of the training as listed below. The training is interchangeable for other Varian Education Courses and Applications Training, provided that the changes are equivalent to the total quantity of flex credits purchased.

Training Descriptions and Credits Required:

ED: CL222 Respiratory Gating - (Qty: 1, 2 credits each)

Includes Tuition and Materials for ONE Person

The Respiratory Gating course goal is to provide participants with sufficient knowledge of the principles and practice of respiratory gating in radiation oncology for clinical implementation. The Respiratory Gating course will cover the following topics: rationale for respiratory gating, clinical application of respiratory gating, general overview of respiratory-gated CT simulation, respiration-synchronized conventional simulation, and respiratory-gated treatment delivery for both Conformal Radiotherapy and IMRT/VMAT. The course also covers the acceptance test procedures for Respiratory Gating and routine QC/QA procedures for respiratory-gated treatment.

PLEASE NOTE: This course is suitable for both Clinac and TrueBeam users.

Designed for Radiation Therapists and Medical Physicists
Pre-Requisites: None
Software Version: OBI 1.5, TrueBeam 1.6

Duration and Location
1.5 days
Varian Education Center
Las Vegas, Nevada, USA

FlexCredits Eligible

Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals), unless otherwise stated.

Item	Qty	Product Description
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ED: TB201 TrueBeam for Physicists - (Qty: 1, 5 credits each)

Includes Tuition and Materials for ONE Person

The TrueBeam for Physicists course provides training for Medical Physicists responsible for TrueBeam in a clinical environment. This course describes TrueBeam's component hardware, software and control systems. Applicable settings in OSP, administration and user rights are discussed. Treatment and imaging applications are described with use cases in MV imaging, kV paired images, Marker Match, CBCT and Respiratory Gating. Delivery of Conformal, Automated, IMRT, RapidArc, Gated, and Electron fields is reviewed. Pre-treatment QA and delivery is demonstrated. QA tests delivered with the machine as well as RapidArc commissioning tests are discussed and demonstrated. The Service application is demonstrated with an overview of interlocks and faults. Absolute Dose and imaging calibrations are covered.

PLEASE NOTE: For more in-depth calibration and maintenance training, see TrueBeam Technical Maintenance I & II.

Designed for Medical Physicists
 Pre-Requisites: Masters degree in Medical Physics, or equivalent
 Software Version: TrueBeam 1.6

Duration and Location
 4.0 days
 Varian Education Center
 Las Vegas, Nevada, USA

FlexCredits Eligible

Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals), unless otherwise stated.

Section 5 Flex-Credits for Biomed Education Course (Tuitions Only)

* The TrueBeam Technical Maintenance I Course is a two-week course.
 Total of 10 classroom days.

5.01 17 Varian Flex-Credit

Catalog #: PEC001001002

Varian FlexCredits are to be used for the purchase of Education courses provided by Varian Medical Systems at one of our Education Centers and/or onsite Applications Training. Entitlement training is not transferable for other courses, products or services and cannot be applied towards flex credits. FlexCredits cannot be applied towards the purchase other Varian products

Item	Qty	Product Description
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or services.

Varian FlexCredits expire 24 months after purchase. Flex credits are for the intended use of the training as listed below. The training is interchangeable for other Varian Education Courses and Applications Training, provided that the changes are equivalent to the total quantity of flex credits purchased.

Training Descriptions and Credits Required:

 ED: TBM101 TrueBeam TM1 - (Qty: 1, 17 credits each)

Course registration is limited to full time employees of Varian's customer (and not to part-time employees, contractors, or anyone who performs services for entities other than the customer that registers the participant in the course).

Includes Tuition and Materials for ONE Person

The TrueBeam Technical Maintenance 1 course is the intent to acquaint and familiarize the student with the general accelerator function, operation and routine support. The course will give a basic technical understanding of machine concepts and day-to-day maintenance while providing a working terminology for communication with service personnel.

Designed for Biomedical Engineers

Pre-Requisites: Training and experience in advanced electronic technology.

Software Version: n/a

Duration and Location

10.0 days

Varian Education Center

Las Vegas, Nevada, USA

FlexCredits Eligible

Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals), unless otherwise stated.

Section 6 Travel and Lodging Allowance

Item	Qty	Product Description
6.01	8	<p>Travel and Lodging</p> <p>Catalog #: VAR001001003</p> <p>Allowance is applied only to the travel and lodging expenses, including airfare, hotel accommodations and rental car.</p> <p>The customer is responsible for any expenses outside of the allowance. Travel and lodging charges will be direct billed and are not reimbursable if travel is booked outside of Balboa Travel. The hotel must be Varian preferred. Any remaining balance is non-refundable.</p> <p>Please contact Balboa Travel Agency at 877-593-7220 in order to make the necessary travel arrangements once you complete the online registration at www.variantraining.com and receive an email confirmation for the course. Be sure to provide Balboa your Varian sales order number.</p> <p>This Travel and Lodging allowance expires 18 months from the acceptance date of your equipment.</p>

Section 7 IsoCal Upgrade CL-21EXS H140133

OBI & CBCT Upgrade for CL-21EXS H140133 already purchased under LSS20111026-003G SO#320713855 and did not install yet.

7.01 1 IsoCal Upgrade

Catalog #: OBU001003004

IsoCal is a geometry calibration method that uses a phantom of known geometry in combination with an insert for the MV collimator to calibrate the MV and kV imaging systems. The general calibration process is to acquire a variety of MV images to determine the location of the treatment (radiation) isocenter. Then kV images are acquired and used to estimate the corrections needed to map all acquired kV images to the treatment isocenter. [If only MV imaging is installed on the accelerator, then only the first step of the process is performed.] One set of MV images necessary for the IsoCal calibration requires rotating the MV collimator by 270 degrees to identify the central axis of collimator rotation. This means that the Extended Head Rotation capability of the Clinac is a pre-requisite for IsoCal to function. The principle of operation of IsoCal is the following: By knowing the nominal location of the source, the nominal location of the x-ray detector, and the location and shape of the BB phantom, it is possible to predict where the projection of the BBs will appear in the acquired images. Any deviation between the predicted and the measured BB locations can be accounted by motion of the x-ray source, the x-ray detector or both, using IsoCal.

Includes IsoCal phantom, MV insert, supporting software, installation, and calibration for one linear accelerator.

Supports the On-Board Imager® kV imaging system.

OBI Pre-Requisites:

OBI 1.5

Exact Arm

Item	Qty	Product Description
		<p>Clinac Pre-Requisite: Extended Head Rotation</p> <p>OR</p> <p>Supports PortalVision™ aS1000 and aS500II MV imagers. PortalVision Pre-Requisites: Exact Arm MV Repositioning or PV Advanced Imaging for 4DITC on qualified HE Clinac Note limitation for system types below: - Clinac iX/2300 system serial # 5100 and above, or Silhouette configurations serial #940 and above.</p> <p>Clinac Pre-Requisite: Extended Head Rotation</p>

Section 8 Sun Nuclear Items Per Quote #00333306 7/11/2014

1093000-1 rf-Daily QA™3 (Qty.2)
Real time wireless data transmission from 13 total ion chambers for daily output, flatness and symmetry, electron & photon energy trending (no buildup or additional attenuation required. 12 total diode detectors for Light : Radiation field coincidence. Real-time air density correction with results displayed on PC Windows software in real time. Includes comprehensive database manager for graphical data presentation and daily therapist guide. 25 meter power-data cable, USB power-data interface, USB cable. 1 year warranty included. See product datasheet for minimum PC requirements.

8.01 1 Sun Nuclear Custom Quote #00333306 7/11/2014
Catalog #: VAR001001011

Section 9 Outsourced Physics Commissioning: Custom Quote#224 6/06/2014

Per Custom Quotation #224 received 6-June-2014 from Robbie Hakeem, MSc, at Radphys Oncology Services, LLC, Option 1.

9.01 1 Custom outsourced Physics service (SOW)
Catalog #: PSO001100001

Item	Qty	Product Description
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Section 10 Trade-In Credit for Clinac 21EXS #H140133

10.01 1 Trade-In

Catalog #: VAR001001004

The trade-in value provided for the equipment is based upon the successful inspection by Purchaser and removal of the equipment on or before the shipping allocation date or other removal date agreed upon in writing. Delays to this schedule or failure of inspection may reduce the trade-in value.

Equipment must be kept in clinical operating condition and serviced according to the original manufacture's recommendations until time of removal from site. This will be the responsibility of the customer. Customer must allow Purchaser to bring potential buyer(s) to the site to inspect the unit on a mutually agreeable schedule.

Unless otherwise noted, trade-in values include standard rigging. Shoring of floors, elevators, cranes and other non-standard rig item are excluded and are the responsibility of the customer. Trade-in includes all parts, spare parts, accessories, technical manuals and all service records.

Section 11 Removal /Disposal of Existing Clinac 21EXS H140133

Removal & Disposal of existing Clinac 21EXS #H140133 at future time to be determined.

11.01 1 Remove/Dispose Existing Equipment

Catalog #: VAR001001007

Section 12 Stand Alone Accessories

12.01 1 Electron Applicator Set 65.4 6x6

Catalog #: ACU001010009

12.02 1 Electron Applicator Set 65.4 6x10

Catalog #: ACU001010010