

Item No. Qty		Description
1	1	<p>Senographe Essential Diagnostic System Senographe Essential full field digital mammography system provides a comprehensive breast care solution that includes screening, diagnostic and interventional capabilities, with advanced ergonomic design for the technologist, exceptional patient comfort and seamless workflow connectivity. Senographe Essential features the innovative 24x31cm detector, designed to offer enhanced breast coverage in a single image and a fast and efficient workflow. Smaller breasts are also easily imaged in any view with paddles that can slide to both sides of the detector. Senographe Essential offers enhanced image quality for increased diagnostic confidence because of the excellent detector performance at a low dose. Ergonomic design for technologists</p> <ul style="list-style-type: none">• Intuitive user interface• One touch access to preset angulations for quick and easy positioning• Two speed motorized movements for fast and precise operation• Sliding compression paddles can move to the side of the detector for excellent compression of any breast in any view Enhanced patient comfort• Patient friendly design• Easy wheelchair access• Ergonomic integrated bucky Outstanding Image Quality• Enhanced Detective Quantum

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	<p>Efficiency (DQE)</p> <ul style="list-style-type: none"> • Molybdenum/Rhodium dual track tube • Automatic Optimization of Parameters (AOP) transparently selects all exposure parameters based on breast radiological properties • Three AOP modes enable more flexibility in dose management • Enhanced views with Fine View and improved contrast with Premium View Seamless digital workflow connectivity • Automated Quality Control • Integrated Repeat and Reject Analysis function Senographe Essential Technical Specifications Image Quality Detector DQE • DQE typical values: 70% at 0lp/mm, 61% at 2.0Ip/mm, 24% at 5.0Ip/mm • Measurement conditions: Mo anode track, Mo filter, 28kV, 8.5mR detector entrance dose, 4.2cm PMMA Detector • Detector size: 24x30.7cm • Pixel size (pitch): 100 um • Acquisition dynamic range: 14 bits • Image size (XxY): <ul style="list-style-type: none"> – 3062x2394 pixels (large image size) approximately 14MB per image – 2294x1914 pixels (regular image size) approximately 9MB per image • Patented needle structure CsI scintillator single piece

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	<p>construction</p> <ul style="list-style-type: none"> • Closed loop liquid cooling Tube Technology • X-Ray tube type: Apollon • Anode target materials - Dual track: Molybdenum (Mo), enriched with Vanadium and Rhodium (Rh) • Four focal spots: 0.1 and 0.3 IEC on each target • Target angle: 0 degrees • Maximal high voltage: 49kV • Tube current: <ul style="list-style-type: none"> – Molybdenum target: 100 mA from 25 to 30kV on large focal spot 40 mA from 25 to 30kV on small focal spot – Rhodium target: 62mA from 25 to 30kV on large focal spot 35mA from 25 to 30kV on small focal spot • Anode size (tracks diameter): 100mm • Anode heat storage capacity: 250kj (340kHU) • Anode maximum dissipation: 500W (40kHU/min) • Max casing continuous dissipation: 150W (12 kHU/min) at 104 degrees Fahrenheit • Permanent filtration: 0.69mm Beryllium • Weight: 15.4 pounds • X-ray tube assembly: self-encased X-ray tube oil free, lead free, air-cooled head • Tube protection: software monitoring of tube load

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	<p>Grid/Breast Support</p> <ul style="list-style-type: none"> Ergonomic breast support for patient comfort Motorized installation and removal of the grid and breast support for geometric magnification Breast support material: low attenuation carbon fiber composite Grid ratio: 5:1 Grid frequency: 36 lines/cm Optimized grid motion ensuring no grid structure artifacts in image Detector to breast support edge-to-edge distance less than or equal to 5mm Automatic Exposure Automatic Optimization of Parameters (AOP) Fully automatic mode AOP is a fully automatic exposure system that selects all exposure parameters based on radiological density of the breast for exceptional and consistent image quality: track (Mo or Rh), filter (Mo or Rh), kV, mAs The system identifies the most dense part of the breast to select the appropriate exposure parameters Three AOP modes are available for more flexibility: <ul style="list-style-type: none"> "Contrast": dose to patient comparable to screen/film mammography "Dose": priority is given to dose reduction

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	<ul style="list-style-type: none"> – "Standard": balances low noise and dose reduction Manual Mode • Manual selection of all parameters: track, filter, kV and mAs Collimator Filters: Molybdenum: 0.030mm; Rhodium: 0.025mm • Field of View (FOV) in detector plane, in cm <ul style="list-style-type: none"> – For standard contact views: 24x31 maximum FOV or 19x23 regular FOV (centered or off-centered left and right based on the paddle inserted) • Field of View (FOV) selection: automatic and manual • FOV size: selected automatically based on paddle or geometric magnification platform used, can be modified manually by using the collimation size button on the tube head • FOV location (left, right, center): selected automatically based on the tube arm angle, can be modified manually by using the collimation position switch on the tube head • Compression and exposure are prevented if the FOV and compression paddle sizes or locations are not consistent • Light centering device: a light automatically switches on when a preset position is reached, at compression start or at paddle insertion; can be turned on with

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	<p>the collimation switch buttons located on the tube head</p> <p>Compression</p> <ul style="list-style-type: none"> • Compression modes: <ul style="list-style-type: none"> – Motor driven compression up to 20 daN – Manual compression possible up to 30 daN • Dual foot-pedals for column height and compression adjustments • User defined motorized compression force limit: 4 to 20 daN • Minimum force for AOP: 3 daN • Compression speed: 2 speed levels • User can select automatic decompression after exposure to minimize patient time under compression • User-defined maximum decompression height Safety • Gantry locked when compression force applied Positioner • Isocentric arm with motorized rotation and vertical movement • Source to image receptor distance: 660mm • Floor to image receptor distance: from 65cm to 150cm • Rotation angle: - 165/185 degrees • Ergonomic handles: two on both sides of the tube arm and two additional handles at the detector level User Interface • Four sets of dual speed switches for rotation and lift movements

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	<ul style="list-style-type: none"> • Four sets of preset position buttons for quick and easy positioning in CC and MLO • Automatic stop at +/-90 degrees for lateral positions • Collimation buttons on the tube head for field of view size and location • Parameters display <ul style="list-style-type: none"> – Tube arm support rotation angle – Compressed breast thickness (in mm) – Compression force (in daN) – Ergonomic control console – Controls exposure – Provides information on system status – Gives access to advanced parameters for system set-up • Patented automatic view names marking based on breast laterality • View name can be edited at any time before the examination is closed Acquisition Workstation • Small footprint • Time to display processed image (average): 14 seconds • Time between exposures (typical): 12 seconds • Dose calculated and displayed on the image after every exposure (Entrance Skin Dose and Average Glandular Dose) • Dual core HP workstation <ul style="list-style-type: none"> – Memory: 1GB RAM + 4MB L2

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		cache
		– Hard disk: 1 internal 250 GB disk, 7200 RPM
		– Image storage: 15000/25000 large/regular field of view
		– Port: one Ethernet port 10/100 Mbits
		– DVI video board
		• Display (standard)
		– High performance black and white LCD 1MP
		– monitor
		– 48cm (19") medical grade
		– 1280x1024 pixels (landscape)
		– 8 bits display
		– High luminance - up to 500 Cd/m2
		– Contrast ratio: 500:1
		– Viewing angle: 170 degrees
		– Weight: 6.4kg (14.9lbs)
		– Mounted on a rotating arm for easy in-room access
		• Image Presentation
		– Fine View processing provides sharp images with enhanced conspicuity, based on detector physics
		– 2 options for primary image processing: 1. Thickness Equalization which provides a "film-like" aspect with improved visibility of the skin line 2. Premium View* enhances local contrast
		– Automatic windowing (window level and window

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	width)
	<ul style="list-style-type: none"> – Other features: zoom, roaming, inversion, flip, rotation of images, window width and level setting, annotations and measurement • Un-interruptible Power Supply (UPS) allows to close the examination without loss of information in the case of a power failure Connectivity • DICOM 3.0 platform: <ul style="list-style-type: none"> – Modality Worklist User – Storage Provider – Storage Commitment User – Query/Retrieve User – Basic Grayscale Print User – Verification Provider – DICOM-compliant CDRW Data Interchange • Connectivity features: customizable Autopush to multiple DICOM databases, Autoprint, Autodelete based on Storage Commitment • Modality Perform Procedure Step User • Connectivity to GE Service for remote diagnostic capability Quality Assurance • Complete quality control program • Automation of quality control tests: Flat Field, MTF, AOP, SNR, CNR • Data can easily be exported for data tracking

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	<ul style="list-style-type: none"> Automated Repeat and Reject Analysis Radiation Shield Stand alone or integrated to control console High Voltage Generator 0 Generator type: high frequency single phase power supply Ripple: <4% from peak to peak Power: 5kW max mAs range: 4 to 500 mAs (depending on track, filter and kV) kV range: 22 to 49kV, in 1kV steps Generator protection: software monitoring of generator and tube load Power Supply Input frequency: 50Hz/60Hz Input voltage: single-phase 200/208/220/240V APC Smart-UPS 750 VA Standard Configuration Motorized isocentric gantry X-ray tube with rotating Mo/Rh anode 24x31cm flat panel detector Acquisition workstation <ul style="list-style-type: none"> CD-RW LCD display X-ray protective shield Control console UPS Pair of dual foot-pedals High-frequency generator and conditioner Face shield 24x31cm bucky with grid 24x31cm paddle

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		<ul style="list-style-type: none"> • 19x23cm sliding paddle • 24x31cm ergonomic sliding paddle that conforms to the breast • 1.5 and 1.8 magnification stands with dedicated paddles (19x23cm, round spot, square spot) • Square spot sliding compression paddle • Round spot sliding compression paddle • Quality control toolkit • User manual and technical documentation
2	1	<p data-bbox="500 737 821 758">USA PowerLook AMP iCAD 7.2</p> <p data-bbox="480 783 948 1129">PowerLook Advanced Mammography Platform (AMP) is iCAD digital mammography CAD platform offering radiologists the flexibility to choose the products and functions that best fit their reading environment. A wide range of tools for disease detection and analysis provide users with workflow enhancements that improve overall efficiency.</p> <p data-bbox="480 1157 948 1398">Multi-vendor CAD server allows for easy practice expansion. PowerLook AMP includes a multi-vendor CAD server that provides consistency across all digital mammography systems. PowerLook AMP allows hospitals and imaging facilities to:</p> <ul style="list-style-type: none"> • Process cases using a single server • Connect up to 4 connections from any combination of supported mammography acquisition

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	<p>devices</p> <ul style="list-style-type: none"> • Eliminate the need to purchase a separate server for each digital mammography system • Reduce hardware and service costs <p>In the U.S., supported vendors are GE, Siemens, Fujifilm Im, or Hologic (Selenia). Outside of the U.S., additional vendors are available, including Philips Microdose, IMS Giotto, Philips CR and DR, Planmed, and Agfa.</p> <p>PowerLook promoted by GE is offering CAD 7.2 CAD 7.2 algorithms analyze mammography images using methodologies that are complementary to the radiologist. Potential cancers are identified using patented artificial intelligence and pattern recognition technology to analyze images and identify patterns. Sophisticated mathematical analysis identifies and marks suspicious areas without obscuring the underlying image, enabling fast and accurate reading.</p> <p>Clinical Performance:</p> <ul style="list-style-type: none"> • Detects up to 72% of actionable missed cancers in an average of 15 months earlier than screening mammography alone* • 90-96% sensitivity with 2.0 or 2.9 false positives per 4-view study * Brem RF, Baum J, Lechner, M Kaplan, S Souders, S Naul L. Gill, Hoffmeister, J. Improvement in Sensitivity of Screening Mammography with Computer-Aided Detection: A

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	<p>Multi-institutional Study. AJR 2003; 181: 687-693</p> <p>CAD markers:</p> <ul style="list-style-type: none"> • CAD marks highlight suspicious lesions without obscuring underlying structures • Marks densities with ellipses and microcalcifications with rectangles that surround the region of interest <p>Seamless DICOM integration enhances clinical workflow. PowerLook Digital platform provides powerful and flexible DICOM connectivity solutions - for optimal digital workflow and enabling seamless integration with acquisition systems, review workstations, and PACS from leading vendors. Flexible integration options enable CAD results to be viewed on workstations or sent to a printer.</p> <ul style="list-style-type: none"> • Analyses unlimited views per studies • Processes CAD on up to 30 four-views studies per hour • CAD server supports up to four FFDM system <p>Flexible DICOM Connectivity</p> <ul style="list-style-type: none"> • Supports multiple DICOM outputs including: <ul style="list-style-type: none"> – Mammography CAD Structured Reporting – DICOM 6000 Overlay – Secondary Image Capture – RTSS – Grayscale Presentation State

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		<ul style="list-style-type: none"> - Encapsulated PDF • Sends CAD results to multiple destinations in different formats simultaneously • Automatic send/receive or manual push of CAD results • 10/100/1000 Base T Ethernet connectivity • Remotely accessible <p>CAD server Processor: Intel i3 Chassis: Desktop with pedestal to convert to tower configuration Hard Drive: 250 GB Network Adaptor: Up to 1000 base T Operating System: Windows 7 Embedded 64 bit</p>
3	1	<p>Flexible and Ergonomic compression paddle 24 x 31cm for Senographe Essential</p> <p>The optional ergonomic 24x31 cm sliding paddle provides tilting and flexibility for better compression uniformity from chest wall to nipple.</p> <p>Positioning is made easier especially in MLO position for large pectoral muscle and in CC when chest wall and nipple side show large thickness variation.</p> <p>Patient comfort is improved by requiring less compression on pectoral muscle or chest wall to achieve proper compression on the whole breast.</p>
4	1	<p>Sliding Flexible and Ergonomic compression paddle 19 x 23 cm for Senographe Essential</p> <p>The optional ergonomic 19x23 cm sliding paddle provides tilting and flexibility for better compression</p>

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		<p>uniformity from chest wall to nipple. It is used in combination with the 19x23 field of view.</p> <p>Positioning is made easier especially in MLO position for large pectoral muscle and in CC when chest wall and nipple side show large thickness variation.</p> <p>Patient comfort is improved by requiring less compression on pectoral muscle or chest wall to achieve proper compression on the whole breast.</p>
5	1	<p>Additional Extension Radiation Protective Shield</p> <p>Extension shield that widens the X-ray protective shield. This is an extension for the lead protection screen and can be fitted either right or left side. The radiation shield extension kit requires the standard radiation shield.</p>
6	1	Stand-alone Radiation Screen
7	1	Set of Plexiglass Plates for Quality Control
		<p>These plexiglass plates are used for quality assurance procedures for Senographe DS or Senographe Essential.</p>
		System Power Supply Cable
8	1	1MP 19" Black and White LCD Monitor
9	1	<p>Monitor is mounted on a rotating arm to the control station.</p> <ul style="list-style-type: none"> • 8cm (19") medical grade LCD monitor • active resolution: 1280 x 1024 • viewing angle: 170 degrees

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		<ul style="list-style-type: none"> • Contrast ratio: 900:1 • Calibrated luminance: 400 cd/m2(squared) • Weight: 6.4kg (14.88lbs) • Power requirements: AC 100-120V, 200-240V; 50/60Hz • Power consumption: <58W
10	1	Enhancement of the Premium View software to display dark and bright images, such as implants
11	1	<p data-bbox="488 590 899 653">Mammography Breast Phantom- ACR Gammex 156</p> <p data-bbox="488 680 899 926">The Mammographic Accreditation Phantom is designed to test the performance of a mammographic system by a quantitative evaluation of the system's ability to image small structures similar to those found clinically.</p> <p data-bbox="488 947 899 1043">Objects within the phantom simulate calcifications, fibrous calcifications in ducts, and tumor masses.</p> <p data-bbox="488 1073 899 1247">The phantom is also designed to determine if a mammographic system can detect small structures that are important in the early detection of breast cancer.</p> <p data-bbox="488 1276 932 1451">Test objects within the phantom range in size from those that should be visible on any system, to objects that will be difficult to see even on the best mammographic system.</p> <p data-bbox="488 1472 859 1535">Breast phantom is compatible with analog and digital equipments.</p> <p data-bbox="488 1556 899 1589">Approved by ACR for Mammography.</p>

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SPECIFICATIONS		

12	1	<ul style="list-style-type: none"> • Height: 1.75 in. (4.5 cm) 	Width:
		<ul style="list-style-type: none"> • 4 in. (10.2 cm) 	
		<ul style="list-style-type: none"> • 4.25 in. (10.8 cm) 	

2 Days MM TiP Onsite Training

Two Day MM Onsite Training provided from 8AM to 5PM, Monday through Friday. Includes TELL expenses. Days provided consecutively.

This training program must be scheduled and completed within 12 months after the date of product delivery.

3 Days MM TiP Onsite Training

Three Days MM Onsite Training provided from 8AM to 5PM, Monday through Friday. Includes TELL expenses. Days provided consecutively.

This training program must be scheduled and completed within 12 months after the date of product delivery.

Options

(These items are not included in the total quotation amount)

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14	1	<p data-bbox="516 296 1268 464">The MammaWorkstation features softcopy reading with integrated reporting and CAD display. The Workstation is suited for reading direct digital mammography (DR) and Computed Radiography (CR) images from all major manufacturers, as well as well as for viewing digitized screen film images.</p> <p data-bbox="516 485 1187 621">The hardware is composed of Windows 7 x64 based HP 2800 computer coupled with 2x Barco Mamma Coronis 5MP LCD monitors, a 19" non-diagnostic LCD monitor and the IDI Second Edition Keypad.</p> <p data-bbox="516 642 1268 884">Intended use MammaWorkstation is designed to assist radiologists in conducting primary diagnostic review for diagnostic and screening mammography through flexible and interactive manipulation of multi-modality softcopy images. It provides image review, manipulation, analysis, post-processing and printing capabilities that support image management display needs in the medical environment.</p> <p data-bbox="516 915 1263 1125">MammoWorkstation is designed to give easy and economic access to and display of multi-modality softcopy images, structured reports, and CAD results through interfaces to various image storage devices using DICOM or similar interface standards. It supports creation of structured reports according to the DICOM breast imaging report templates.</p> <p data-bbox="516 1146 1268 1430">MammaWorkstation supports teleradiology and teleconferencing providing access to multi-modality softcopy images and structured reports in multiple locations within and outside the hospital. lossy compressed mammographic images must not be used for primary diagnostic interpretation unless approved for use in digital mammography. Display monitors used for primary diagnostic interpretation of mammographic images must be approved for use in digital mammography.</p>
15	1	1 Day Service Pre-install IDI Connectivity
16	1	<p data-bbox="524 1514 919 1535">2D Biopsy Optical Localizer Includes:</p> <ul data-bbox="537 1556 729 1579" style="list-style-type: none"> • 2D Cross-hair

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17	1	<ul style="list-style-type: none"> • 2D Large localization paddle • 2D Spot localization paddle <p>Senographe Essential Diagnostic Package Package comes complete with items required to upgrade the Senographe Essential e to a full diagnostic unit. The diagnostic kit includes:</p> <ul style="list-style-type: none"> • 1.5 Magnification stand • 1.8 Magnification stand • 19x23cm Magnification paddle • 2 Table stands • Installation manual
18	1	<p>3 Days SenoBright or IDI Workstation training</p> <p>One 2 Day and one 1 day TIP Onsite Training for the SenoBright or IDI Workstation</p> <p>Includes TELL expenses. Days provided consecutively.</p> <p>This training program must be scheduled and completed within 12 months after the date of product delivery.</p>