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#### O640 NM/CT System - 3/8" EXCEL

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Optima NM/CT 640 EXCEL is a general-purpose high performance hybrid SPECT imaging system. It combines integrated nuclear imaging sub-system featuring a free-geometry slim gantry, advanced all-digital Elite NXT detectors with 3/8" detectors, cantilevered patient table and powerful acquisition station, with a dedicated low-dose high resolution CT imaging sub-system designed for attenuation correction of SPECT and anatomic localization of radiotracer uptake in the body.

Including:

2 x Slim-All-Digital NM Elite™ NXT detectors with the following key features :

- o 3/8" crystal thickness
- o 59 high quantum efficiency PMT's, each PMT coupled with one ADC
- o Extra large, rectangular UFOV with uncut corners: 540 mm x 400 mm (21.25 Inches x 15.75 Inches)
- o Shielded for 40-620 keV energy range
- o Contoured detector housing for optimal cardiac and brain SPECT imaging

· 1 x Free-geometry 70 cm bore gantry, featuring real-time automatic body contoured scanning in both 180D and 90D detectors orientations for high efficiency SPECT and WB scans. The gantry features also upright and horizontal detector orientations for maximum clinical versatility and ultra-fast, simultaneous multi-axes motion which provides fast setup with the following key features :

- o Externally mounted detectors, with flexible positioning for all Major clinical studies, including stretcher, standing and seated Patients
- o Automatic, application-specific home positioning for table and detectors
- o Real-time status display
- o Intuitive, icon-based 20 function handset accessible from either side of the gantry
- o Real-time, infrared automatic body contouring system too safely minimize detector-to-patient distance in whole body, 90 degree SPECT and 180 degree SPECT
- o Fast, semi-automatic dual collimator exchange

· 1 x Dual-axis premium ergonomic patient imaging table with low-attenuation carbon fiber table-top with the following key features :

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- o Fast, manually controlled emergency patient egress
  - o Telescopic transporter ensuring accurate CT-SPECT registration
  - o Easy patient handling, comfortable tabletop
  - o Obstruction-free floor installation enables table pivot to 45 or 60 degree angles
  - o Automatic home positioning for common imaging procedures
  - o Optional integrated EKG

· 1 x user-friendly Hybrid SPECT/CT acquisition station.

The integrated SPECT-CT acquisition console employs a Graphic User Interface for exam scheduling, scan acquisition, CT reconstruction and scan QC as well as utilities for protocol editing and routine quality control and analysis.

In addition, the Bright Speed Elite CT desktop environment is available for CT imaging including: protocol definition, networking and archiving manual film control, as well as CT image processing such as multi-planar reformatting (MPR), multi – projection volume rendering (MPVR) and MR image display. Including the following key features:

(a) H/W

- o XW4600 HP workstation
- o Intel® Core 2 Quad Q9300
- o Graphic card – NVIDIA Quadro NVS 290
- o RAM graphic card - 256MB
- o 2 GB RAM
- o Hard drive size 2x80GB
- o Multi-Tasking, Multi-Windows Environment Connectivity via DICOM 3.0
- o Choice of various LCD monitors to be ordered separately
- o Broadband Connectivity to broadband/highspeed VPN (Virtual Private Network) connection, single point of access using 3DES encryption technology

(b) S/W

- o Multi-scan protocols define the normal sequence of scans for the selected study protocol and additional scans can be added.
- o Factory defined protocols support standard NM and SPECT-CT clinical applications.
- o Preview of scan conditions including display of:
  - § Spectrum for each detector is also shown and can be used to adjust the energy window
  - § Persistence display during patient positioning (visible on the console as well as the

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gantry-side display).

§ ECG trigger signal display for quality control purposes

- o Synchronizing patient ECG trigger data with multi-gated nuclear image data framing

- o Storing the acquired data in the patient database

- o Online live display of:

§ Acquired data and imaging parameters

§ ECG trigger signal

§ Gantry status including gantry position & detector orientation

§ Progress and elapsed time

§ X-Ray exposure indicator

- o Data Viewer

§ Threshold and windowing control in multiple window settings

§ Cinematic display and scroll of dynamic and all multi-frame datasets

§ Selection of display color maps

· 1 integrated low-dose CT with 4 slice functionality , inherently SPECT-registered CT  
Transmission attenuation correction and localization with the following key features :

- o Tube: GE MX135CT

- o Tube anode Heat Storage capacity : 2.0 MHU

- o Generator: GE Gedi 42 AC, 4.2 kW

- o Clinical operation tube current : 10-30 mA.

- o Scan Times: 1 or 2 sec per rotation

- o Pitch factors: 0.75:1, 1.25:1, 1.75:1

- o Detector type: Ceramic - gadolinium oxysulfide (Gd<sub>2</sub>O<sub>2</sub>S)

- o Number of slices: 4

Slice thickness : 2.5 mm

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GE NM 600 Series LEHR Collimators (2) with Cart

NM 600 LEHR Collimators with Cart

NM 600 Low Energy High Resolution Collimators

Includes:

- o Two LEHR Collimators

- o Collimators Mounted on a Dedicated  
Collimator Cart

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1	<p>D670/630 &amp; B615 QC Point Source Holder</p> <p>An L-shaped metal plate attachable to the wall with an opening for a syringe in order to acquire point source-based flood acquisition at a few meters distance from vertically positioned detector for QA purposes.</p>
1	<p>D670/630 &amp; B615 QC Flood Source Holder Kit</p> <p>Quality Control Flood Source Holder Kit A large plate mounted at a small distance above the NM detector on which the flood source is positioned in order to perform acquisition of flood studies for QA/QC purposes.</p>
1	<p>QA COR Source Holder</p> <p>Center of rotation source holder for Quality assurance , easily attached to Infinia or Ventri table.</p>
1	<p>NM 600 SERIES BARPHANTOM</p> <p>bar phantom for spatial resolution and linearity tests of gamma cameras. The phantom consists of four quadrants with different bar specification: For each of the quadrant, bar spacing is 2.5mm, 3.2mm, 3.5mm &amp; 4.0mm.</p>
1	<p>STRAPS AND PAD KIT</p> <p>Long table pad and straps</p>
1	<p>NM600 TOUCH RULER</p> <p>NM 600 Touch Ruler An interactive touch-sensitive device mounted at one side of the patient table, used to define nuclear imaging scan range ( start and stop points), saving the need to enter these values manually from the operator console</p>
1	<p>PALLET EXTENDER</p> <p>NM 600 Series Patient Pallet Extender The patient pallet extender for NM 600 Series products can be used to extend the table top for multi-FOV SPECT, SPECT/CT and whole body studies. Length is 600mm; Width is 391mm; 300mm extension Note - The use of the extender requires more space between the camera and the back wall of</p>

	the scan room. Consult with GE Healthcare project manager for minimum room size requirements.
1	CT Service Cabinet Service cabinet for system accessories storage
1	NM600 DETECTORS DISMOUNT NM600 DETECTORS DISMOUNT An option enabling transportation and mobilization of the NM600 series gantry separated from the detectors for easier load in elevators or easier access through restricted paths such as narrow hallways or doorways
1	O640 SEISMIC KIT Seismic anchoring kit for Optima NM/CT 640
1	SEISMIC KIT FOR NM600 PAR Seismic kit for NM600
1	6 Days Onsite Plus 10 Hours TVA 6 Days Onsite Plus 10 Hours TVA 6 Days, 2 Visit Onsite plus 10 Hours TVA training for NM Camera System and Workstation. Onsite training is delivered Monday through Friday between 8AM and 5PM. T&L expenses are included. This training program must be scheduled and completed within 36 months after the date of product delivery.
1	6 KVA UPS for Nuclear Medicine 6 KVA UPS for Nuclear Medicine FEATURES/BENEFITS <ul style="list-style-type: none"> <li>• The use of uninterruptible power enables the system imaging to be completed after the loss of supply power, and allows for saving of valuable data and orderly system shutdown</li> <li>• The Online Double Conversion UPS eliminates all power anomalies such as noise, transients, overvoltage and undervoltage, which could damage the imaging system's sensitive computer components</li> <li>• Improves imaging system reliability, reduces service costs, and increases system uptime</li> <li>• Cell Saver Technology provides conditioned power even during severe brownout conditions without depleting battery resources</li> </ul>

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- System monitoring via: LanSafe III / FailSafe III software, (2) RS-232 Ports
  - PowerPass Module further enhances reliability through Maintenance Bypass Switch which performs maintenance or upgrade your UPS without powering down your critical systems

#### SPECIFICATIONS

- Dimensions (H x W x D): 33.6" x 9.9" x 15.8"
- Weight: 218 lbs.
- Input Voltage: 200 - 240 VAC
- Output Voltage: 120/240, 120/208 VAC
- Frequency: 45-65 Hz

#### COMPATIBILITY

- Maxxus NM

#### NOTES:

- Customer is responsible for rigging and arranging for installation with a certified electrician
- ITEM IS NON-RETURNABLE AND NON-REFUNDABLE

1	SEISMIC KIT FOR E4502JJ A SEISMIC KIT FOR E4502JJ A
1	MAIN DISCONNECT PANEL FOR GE 640 NM-CT SYSTEM Main disconnect panel for GE 640 NM-CT system
1	Ivy 7600 Cardiac Trigger Monitor Kit - No Recorder, Americas Labeling. For GEHC Nuclear Med. The Model 7600 is Ivy Biomedical's fifth generation of cardiac trigger monitors intended primarily for use on patients in applications requiring precision R-wave synchronization. Incorporating a simple, easy to use touchscreen interface, the 7600 displays two simultaneous ECG vectors along with the patient's heart rate. The Trigger ECG vector (top waveform) can be selected from Leads I, II III or Auto Lead Select. The Second ECG vector (bottom waveform) can be selected from Leads I, II or III. If required, High and Low heart rate

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alarm limits can be adjusted to bracket the patient's heart rate so that a violation of these limits produces an audible and visual indication of the alarm.  
Includes roll stand

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#### X4.0 Workstation SPECT

Xeleris\* 4.0 SPECT functional imaging workstation is a Nuclear Medicine, PET, NM/CT, and PET/CT processing, analysis, and review system.

Designed with productivity in mind, it can accelerate workflow and provides a powerful clinical diagnostic tool to the medical imaging community.

Combining streamlined workflow with a comprehensive clinical library and extensive networking capabilities on a functional imaging workstation, Xeleris 4.0 is at the nucleus of productivity in the clinical imaging department.

Utilizing the GE Healthcare-wide graphical user interface, Xeleris 4.0 is the processing and review platform of the Discovery\* and

Brivo\* NM and series, Infinia\*,

Ventri, and all

other SPECT cameras in

GE Healthcare's current offering. Xeleris 4.0

provides the automated processing and connectivity necessary in today's demanding environment.

Xeleris 4.0 SPECT includes Motion detection & correction software.