Bringing the power of imaging to your patients

BodyTom® Elite
Mobile full body 32-slice CT scanner
Your *multi-departmental* imaging solution

**Orthopedic surgery**
- Arthroplasty
- Musculoskeletal disorders
- Hip replacement
- Acetabular fracture
- Knee replacement
- Fractured femur
- Pelvis
- Pediatric orthopedic procedures

**Neurosurgery**
- Tumor resection
- Neurovascular surgery
- Functional and stereotactic neurosurgery
- Pediatric neurosurgery

**Spine surgery**
- Neuromuscular scoliosis
- Cervical, thoracic and lumbar fusions
- Laminoplasty
- Laminectomy
- Vertebroplasty
- Kyphoplasty
- Pediatric spine surgery

**Trauma surgery**
- Acute fracture care
- Accident victims
- Intestinal injuries
- Head-to-toe assessment
- Pediatric trauma surgery
Critical care
- Medical ICU
- Surgical ICU
- Pediatric ICU
- Neonatal ICU
- Neuro ICU
- Burn ICU
- Trauma ICU
- Cardiovascular ICU
- Cardiac ICU

Diagnostic radiology
- Head-to-toe assessment of soft tissue and bone
- Lung screening
- Pediatric imaging
- CT angiography
- CT perfusion

Emergency department
- Acute fractures
- Accident victims
- Intestinal injuries
- Stroke
- Head-to-toe assessment
- Disaster preparedness
- Pediatric trauma

Radiation oncology
- HDR & LDR
- Breast cancer
- Lung cancer
- Sarcoma
- Brachytherapy
- Prostate cancer
- Head and neck cancer
- Gynecological cancer
- Treatment planning
Intraoperative applications

Cranial neurosurgery

The BodyTom® Elite mobile CT, combined with any radiolucent skull fixation device, will transform the operating room into an intraoperative neuro-imaging suite. BodyTom Elite is compatible with surgical navigation and planning systems and provides affordable high quality imaging, enhancing neuro-navigation and surgical outcomes.

Trauma surgery

Rapid triage and management of patients with acute injuries are key elements to trauma care. The BodyTom Elite mobile CT scanner is a complete scanning tool for all emergencies. The unique combination of internal lead shielding and cutting-edge on-board battery system allows any standard trauma bay to be transformed into an advanced CT imaging suite. Such flexibility makes the BodyTom Elite your perfect head-to-toe trauma CT imaging solution.
Spinal neurosurgery

An 85 cm gantry and 60 cm field of view allows BodyTom Elite to transform any operating room into an intraoperative spine imaging suite. The BodyTom Elite is compatible with surgical navigation and planning systems and is capable of imaging the entire spine from C1 to S5 in a single pass, providing high quality 3D images of both bone and soft tissue.

Orthopedic surgery

The ability to perform high quality CT scans in an operating room can dramatically improve both efficiency of care and patient safety. Its internal drive system enables the BodyTom Elite to be moved between operating rooms, providing necessary scans of critically ill patients. With the BodyTom Elite, any standard operating room can be temporarily or permanently converted into an advanced imaging suite without the expensive build-out costs associated with installing a fixed CT scanner.
Other clinical applications

Critical care

The ability to perform high quality CT scans in an ICU can dramatically improve both efficiency of care and patient safety. Its internal drive system enables the BodyTom Elite to be moved throughout the ICU, providing necessary scans of critically ill patients. With the BodyTom Elite, any standard ICU room can be temporarily or permanently converted into an advanced imaging suite without the expensive build-out cost associated with installing a fixed CT scanner.

Emergency department

Rapid triage and management of patients with acute injuries are key elements to emergency care. The BodyTom Elite mobile CT scanner is a complete scanning tool for emergencies. The unique combination of internal lead shielding and an cutting-edge on-board battery system allows any standard emergency department to be transformed into an advanced CT imaging suite. Such flexibility makes the BodyTom Elite your perfect head-to-toe CT imaging solution for emergency care.
Diagnostic radiology

The large bore BodyTom Elite mobile 32-slice CT scanner with an 85 cm gantry and a 60 cm field of view accommodates the vast majority of patients and provides high quality images of both soft tissue and bone for accurate diagnosis. The DICOM 3.1 compliant images are immediately shared with hospital information systems for expedited patient care. The portability and seamless integration eliminates the expensive build-out cost and makes the BodyTom Elite an affordable primary or backup CT solution for any modern radiology department.

Radiation oncology

CT scans from the BodyTom Elite can help radiation oncologists design treatments with a high level of accuracy, ensuring that tumors get the most effective dose while healthy surrounding tissue and organs are spared. The BodyTom Elite is an ideal 3D imaging tool for use with HDR and brachytherapy applications. The affordability of the system enables you to turn any oncology treatment room into a high resolution imaging suite. Given that the BodyTom Elite is a true CT, it can be a useful treatment planning modality.
BodyTom® Elite point-of-care mobile CT scanner

BodyTom Elite brings the power of innovative imaging to the bedside. As the world's first mobile full body 32-slice CT scanner, BodyTom Elite is capable of transforming any room into an advanced imaging suite.

Uniquely designed to accommodate patients of all sizes, BodyTom Elite provides point-of-care CT imaging wherever high quality CT images are needed.

BodyTom Elite mobile imaging station

BodyTom Elite’s Mobile Imaging Station has advanced visualization software allowing for 2D, 3D and MPR viewing. With its wireless communication capability, BodyTom Elite easily integrates with hospital information systems, surgical navigation, and other technology platforms.

On-board lead shielding provides additional protection for the workstation operator.

Internal drive system

BodyTom Elite’s internal drive system allows a single operator to transport and setup the scanner anywhere it needs to go. Hospital corridors are easily navigated using the 130° wide-angle camera.
The BodyTom Elite is designed with patient and staff safety in mind. The core system comes standard with internal lead shielding to help safeguard against unnecessary scatter exposure. Additional protection is provided by an optional lead shield mounted to the BodyTom Elite imaging workstation.

More standard safety features

System control
- Meets ACR accreditation guidelines
- Key lockout feature
- Individual user log-in
- Preset scanning protocols
- QA phantom test & report
- Patient intercom system

Radiation safety
- Internal lead shielding in the gantry
- Lead shield mounted to workstation
- Protocols based on age/weight
- Dose reduction software available
- Structured dose reporting
## Overview & specifications

### Portability
- Easy to use, built-in drive system
- Internal lead shielding
- Battery powered
- Plugs into a standard wall outlet for charging
- Wide-angle drive camera
- Mobile imaging station

### Seamless integration
- DICOM 3.1 compliant
- Wireless communication
- Interfaces with PACS
- Health Information System (HIS)
- Radiology Information System (RIS)
- Integrating the Healthcare Enterprise (IHE)
- Interfaces with surgical navigation systems
- Dose check

### Imaging
- 32 Slice x 1.25 mm = 4 cm aperture
- 85 cm gantry
- 60 cm FOV
- 1.25 mm, 2.5 mm, 5.0 mm, 10 mm slice thickness
- 512 X 512 image matrix
- Maximum scan length of 2 meters
- Scout scanning
- CT angiography
- CT perfusion

### Imaging station
- 27” LCD | Monitor
- 2D, 3D, and MPR viewing tools

### Scanning modes
- Axial
- Helical
- Dynamic

### Training
- 8 Days of on-site training led by a NeuroLogica Clinical Applications Specialist
- All training CEUs are accredited by the ASRT
- Biomedical engineer and first responder training available

### 1 year all inclusive warranty
- Covers all parts and labor (x-ray tube included)
- 100% warranty on all parts
- Required routine preventative maintenance
- Software updates (safety and/or specification)
Technical specifications

### Installation Requirements

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase</td>
<td>Single</td>
</tr>
<tr>
<td>Voltage</td>
<td>90 - 264 VAC</td>
</tr>
<tr>
<td>Frequency</td>
<td>47 - 63 Hz</td>
</tr>
<tr>
<td>Battery Capacity</td>
<td>Fully Charged - 12 hours (typical)</td>
</tr>
<tr>
<td>Typical Usage</td>
<td>120 V/20 A - 240 V/30 A (dedicated)</td>
</tr>
<tr>
<td>Noise</td>
<td>60 dBA (1 meter distance from scanner bore) 65 dBA (scanner bore)</td>
</tr>
</tbody>
</table>

### Site Requirements

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>15 °C to 35 °C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-25 °C to 70 °C</td>
</tr>
<tr>
<td>Operating Altitude</td>
<td>0-3010 m (0-10,000 ft)</td>
</tr>
<tr>
<td>Operating Humidity Condensing</td>
<td>20 - 80 % non-condensing</td>
</tr>
<tr>
<td>Floor Flatness</td>
<td>&lt;+/- 0.120 inch (3 mm) per 10 ft</td>
</tr>
</tbody>
</table>

### Geometry

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Opening</td>
<td>85 cm</td>
</tr>
<tr>
<td>Scanned Image Field of View</td>
<td>60 cm</td>
</tr>
</tbody>
</table>

### X-ray Generation

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-ray Tube Voltage</td>
<td>80, 100, 120, 140 kV</td>
</tr>
<tr>
<td>X-ray Tube Current</td>
<td>50 - 300 mA</td>
</tr>
<tr>
<td>Focal Spot Size</td>
<td>Large: 1.2 mm x 1.4 mm</td>
</tr>
<tr>
<td></td>
<td>Small: 0.7 mm x 0.8 mm</td>
</tr>
<tr>
<td>Power Supply</td>
<td>42 kW</td>
</tr>
<tr>
<td>Heat Capacity</td>
<td>3.5 MHU</td>
</tr>
</tbody>
</table>

### X-ray Detection

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection System</td>
<td>Solid-state detectors</td>
</tr>
<tr>
<td>Main Detector</td>
<td>32 Rows</td>
</tr>
</tbody>
</table>

### Axial

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation Time</td>
<td>1 sec, 2 sec</td>
</tr>
<tr>
<td>Max. Scan Range</td>
<td>900 mm (90 cm)</td>
</tr>
<tr>
<td>Coverage</td>
<td>8 x 1.25 mm</td>
</tr>
</tbody>
</table>

### Helical

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation Time</td>
<td>1 sec</td>
</tr>
<tr>
<td>Max. Scan Range</td>
<td>2,000 mm (200 cm)</td>
</tr>
<tr>
<td>Coverage</td>
<td>32 x 1.25 mm</td>
</tr>
<tr>
<td>Max. Scan Time</td>
<td>60 sec</td>
</tr>
<tr>
<td>Helical Scan Pitch</td>
<td>0.4, 0.8</td>
</tr>
</tbody>
</table>

### Dynamic

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation Time</td>
<td>1 sec</td>
</tr>
<tr>
<td>Scan Range</td>
<td>40 mm (4 cm)</td>
</tr>
<tr>
<td>Scan Time</td>
<td>60 sec</td>
</tr>
</tbody>
</table>

### Image Reconstruction

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconstruction Matrix</td>
<td>512 x 512</td>
</tr>
</tbody>
</table>

### Image Field of View

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconstructed Field of View</td>
<td>50-60 cm</td>
</tr>
<tr>
<td>Number of Images per second</td>
<td>16 images/second</td>
</tr>
</tbody>
</table>

### Connectivity

- Gigabit ethernet/wireless (A/B/G/N)
- DICOM 3.1 compliant
- Compatible with surgical navigation, HIS, RIS, PACS

### Image Quality

Document provided upon request

### Safeguards

- Meets ACR IQ and dose standards for ABD and head scans
- Dose display prior to scan
- Secure log-in
- Admin privileges needed to change protocol
- Excessive dose lockout
- Dose reporting/auditing

### Dimensions

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height: 79 in (199 cm) Scan Mode</td>
<td></td>
</tr>
<tr>
<td>Height: 81 in (205.7 cm) Transport Mode</td>
<td></td>
</tr>
<tr>
<td>Length: 101 in (256.5 cm)</td>
<td></td>
</tr>
<tr>
<td>Width: 41 in (104 cm)</td>
<td></td>
</tr>
<tr>
<td>Weight: 3510 lbs (1592 kg)</td>
<td></td>
</tr>
</tbody>
</table>

Weight 3510 lbs (1592 kg)
About NeuroLogica

NeuroLogica, a subsidiary of Samsung Electronics Co., Ltd., brings the power of innovative imaging to your patients.

With a strong foundation of expertise in CT design, development and manufacturing, NeuroLogica transforms fixed CT technologies into mobile platforms.

For more information

For more information about BodyTom® Elite, visit www.NeuroLogica.com

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