

Think Efficiency
Think ECLOS



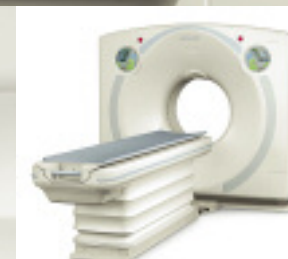
HITACHI

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Hitachi reserves the right to change specifications described herein without prior notice. This document provides general technical descriptions of both optional and standard features.

HITACHI
 Inspire the Next

An Optimum Combination of Advanced CT Technologies

Created by Hitachi, ECLOS16 is a multi-slice CT solution that delivers superb image quality and enhanced workflow in an aesthetic design with an emphasis on efficiency.

Combining a wide range of clinical capabilities with exceptional system reliability and service, the ECLOS16 addresses the need for a quality 16-slice CT system that provides lower total cost of ownership.



Scan Features and Parameters

Providing enhanced applications capabilities, the ECLOS16 simultaneously acquires 16 slices in a fast 0.8-second scan time. This enables shorter breath-holds and reduces patient motion artifacts for maximum image quality. Sub-millimeter slices allow for fine detail images and optimize small lesion and small vessel assessment. ECLOS16's software facilitates user selection of acquisition and reconstruction slice thickness allowing for appropriate review of images and volume data sets for diagnosis.

Scan Parameters

- **Scan times (seconds):** 0.8, 1.0, 1.5, 2.0 3.0
- **Slice thickness (mm):** 0.625, 1.25, 2.5, 3.75, 5.0, 7.5, 10
- **FOV (mm):** 20-500
- **Max scan range (in/cm):** 69/175
- **Max scan rotations:** 100
- **Volume scan pitch:** 0.5625 to 1.6875

Scan Acquisition Types

- Scanogram with real-time display
- Normal scan for axial mode
- Volume scan for helical mode
- Dynamic scan for contrast resolution studies

Protocols

- Pre-programmed emergency
- Pre-programmed normal
- Pre-programmed user default
- Limitless user-defined, customizable protocols

IntelliEC

IntelliEC provides mA modulation to ensure x-ray dose efficiency and consistent image quality through the exam, compensating for patient anatomy and size.

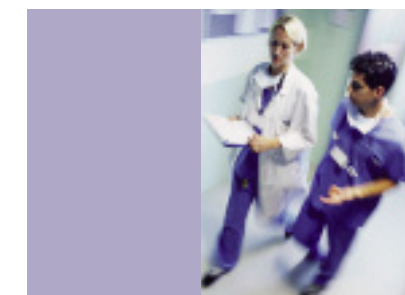
Predict Scan

Predict Scan technology by Hitachi monitors contrast uptake to a user-selectable threshold value and automatically initiates the scan for optimized image contrast.

Image Quality*

- **Spatial resolution:** 0.35 mm
- **Contrast resolution:** 2.5 mm @ 0.25%

* Hitachi: Performance Phantom



Think ECLOS for Refined Technology



Gantry and Detector System

Hitachi pays careful attention to the dynamics between the technologist and patient during the exam. The ECLOS16's design reflects this consideration, allowing the technologist to directly address the patient while maintaining smooth operation essential to fast throughput and a positive patient experience.

Gantry

- **Gantry aperture:** 70 cm
- **Gantry tilt:** +/- 25 degrees
- **Scan localizer:** Laser marker (at preparatory position and scan position)
- **Gantry, table controls:** emergency stop, start/stop scan, home, preset, move to scan plane, table reset, tilt, laser alignment lights, demo breath hold buttons/lights, table in/out, table up/down, collision sensor
- **Foot pedal controls:** home, preset
- **Breathing lights**
- **Patient communication:** intercom, auto-voice

X-ray Detector

- **Type:** Solid state ceramic
- **Number of detector elements:** 24 x 880
- **Detector output:** 16 x 880

X-ray Tube

The x-ray tube combines high power with high durability for long-term image quality. A fast tube-cooling rate minimizes interscan times to promote faster scanning and throughput. No chiller is required simplifying the installation process and enhancing system reliability.

- **Anode heat capacity:** 5.0 MHU
- **Anode max. cooling rate:** 748 kHU/min
- **Tube cooling:** Oil/Air
- **Focal Spot (mm):** 0.7 x 0.8; 1.2 x 1.4

X-ray Generator

Perfectly integrated with the performance characteristics of the high-heat unit x-ray tube, the generator delivers the optimal X-ray power per protocol.

- **Type:** High-frequency inverter control
- **Output:** 48 kW
- **kVp selection:** 100, 120, 130kV
- **mA selection:** 10, 25-250 mA (25mA steps)
250-400 (50mA steps)
- **Max tube current:** 400 mA (120kV)

Patient Table

The robust, high-weight-capacity table accommodates a wide variety of patients without compromising comfort or throughput. Low minimum table elevation facilitates easy transport and placement of disabled patients.

- **Table top width:** 19 in (47.5 cm)
- **Table length:** 107 in (273 cm)
- **Table weight capacity:** 495 lbs (225 kgs)
- **Vertical travel range:** 17 in (42 cm) to 39 in (100 cm)
- **Tabletop travel:** from 5 mm/sec to 100 mm/sec
- **Horizontal travel range:** 73 in (186 cm)

Operator's Console

A highly automated system with advanced software that is easy to learn, the operator's console establishes an efficient environment for acquisition, reconstruction and post-processing. Separate display and system monitors facilitate multi-tasking at the console.

- Fully automated, interactive software platform
- Preprogrammed patient demographics and protocol selection
- Complete protocol-driven scan control
- Auto-archive
- Auto-film

Patient Registration

- Pre-registration
- Emergency registration mode

Image Reconstruction

- **Slice thickness (mm):** 0.625 - 10
- **FOV (mm):** 50 – 500
- **Matrix:** 512 x 512
- **Image reconstruction time:** 5 images/second
- **Immediate image review**
- **CT number range:** -2000 to +4000

Image Display and Analysis

- Multi-frame layout
- WW/WL
- Magnify
- Pan
- ROI
- Image Rotation
- Measurement
- Cine
- Edge Enhancement/Smoothing

Image Processing

- Multi-Planar Reconstruction (MPR)
- Maximum Intensity Projection (MIP)
- Minimum Intensity Projection (MinIP)
- Surface Rendering
- 3D Volume Rendering

Network Capability

- DICOM Print
- DICOM Store
- DICOM Modality Worklist (optional)
- DICOM Query/Retrieve (optional)
- DICOM MPPS (optional)
- IHE-SWF (optional)

Monitors

- 20-inch LCD display monitor
- Image display matrix: 1280 x 1024
- 12-inch LCD touch panel system monitor

Storage Capacity

- Images: 250 GB holds 200,000 images
- Raw data: 300 GB holds 4000 scans
- Archive: 9.2 GB DVD RAM holds 16,000 images (2 sides)
 - Also accepts DVD-R/RW and CD-R/RW



Think ECLOS for Simpler, Cost-Effective Siting and Service

ECLOS16 Site Planning

The siting and operation of the ECLOS16 exemplifies the Hitachi tradition of including ease and cost effectiveness in advanced imaging design. The ECLOS16 incorporates most electronics in its gantry, patient table and operator's workstation, resulting in a very compact footprint that is accommodating to both existing facilities and new construction.

As an acknowledged leader in the imaging market, Hitachi can share an enormous range of site planning experience, as well as a proven system for efficient siting, installation and start-up. Hitachi works with you every step of the process: initial site evaluation and selection, layout, delivery and installation.

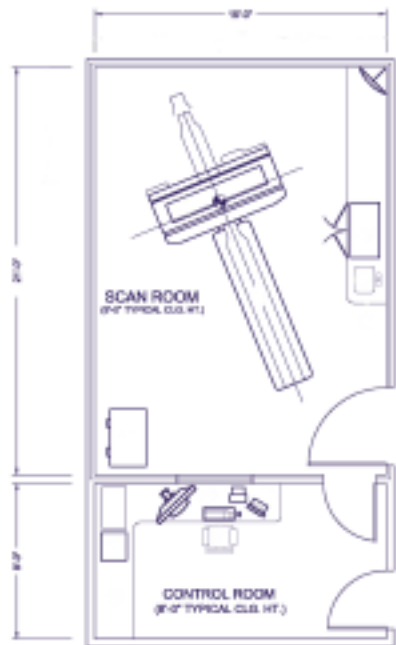


Figure 1

These floor plans illustrate the ECLOS16 in a variety of settings.

- Figure 1 shows the typical floor plan.
- Figure 2 shows an alternate floor plan for placement where available space is limited.
- Figure 3 shows the ECLOS16 minimum space plan.

ECLOS16 Siting Requirements

Power and Environmental Requirements

Input voltage	208, 3 phase
Main breaker	200 AMP
Peak power	75 kVA
Input frequency	50/60 Hz
Operating temperature	20 – 28oC
Operating humidity	35 - 80%

Physical Specifications (in-ft/mm)

	Height	Depth	Width	Lbs/Kg
Gantry	6-1/1840	2-11/875	6-6/1990	2910/1320
Patient Table	3-4/1025	9-0/2725	2-1/630	948/430
Power Distribution Unit	3-9/114	3-4/102	2-4/71	550/250
Workstation	2-0/615	2-6/762	4-0/1220	73/33
Image Processor	2-0/615	2-4/700	1-3/370	175/79
X-Ray Controller	5-9/1750	1-11/565	3-0/900	728/330

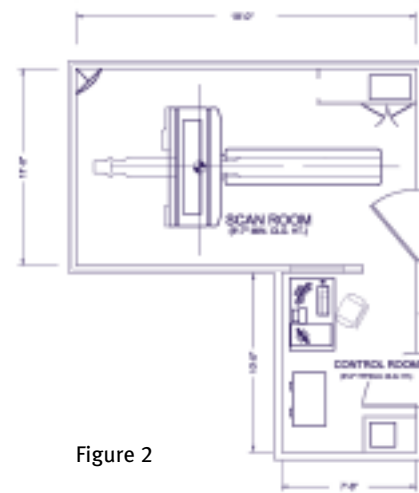


Figure 2

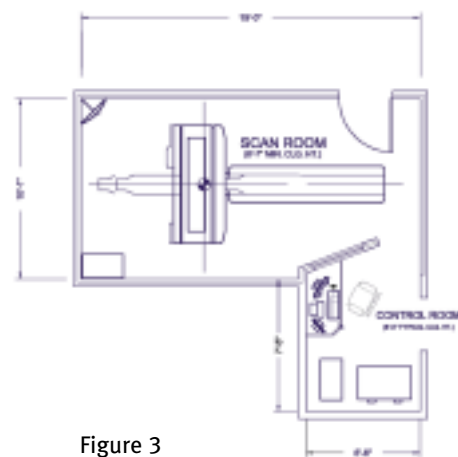


Figure 3

Note: Minimum room size may be subject to local building codes.

Performance, Reliability and Partnership You Can Trust

Designed, engineered and supported by the same company that stands as the undisputed leader in outpatient Open MR, ECLOS16 follows in Hitachi's tradition of excellence in customer service and long-term value.

That tradition rests on the foundation of Hitachi, Ltd., an \$84+ billion global electronics company with more than 90 years of invention and accomplishment. For every customer, in a range of modalities like CT, MR, and ultrasound. Hitachi delivers outstanding uptime, protection from obsolescence, extensive customer support and exceptional business planning to enhance customer success.