

Multi-slice CT scanner

Country of origin | India

Primary function | Diagnosis

Health problem addressed

A computer tomography (CT) scanner is a front line modality for several acute conditions such as stroke and trauma. Developing countries like India, Nigeria, and China, to name a few, have an extremely high burden of conditions like stroke and trauma. However, the CT scan penetration in these countries is very low, in the range of 1-6 CT scan/million inhabitants, compared to 20 CT/million inhabitants in Organisation for Economic Co-operation and Development (OECD) countries.

Disease addressed

Diseases of the circulatory system; diseases of the respiratory system; diseases of the digestive system; diseases of the musculoskeletal system and connective tissue; injury, poisoning and certain other consequences of external causes.

Technical descriptions

The device is a multi-slice CT scanner that enables fast and high resolution imaging of the patient anatomy and related pathology. The scanner requires 50% less space and 47% lower power than previous generation scanners. A newly redesigned interface makes the workflow simpler to learn and use. With up to 32 slices per rotation, it is designed to provide exceptional image quality and supports advanced applications such as CT angiography, colonoscopy and perfusion.

Developer's claims of products benefits

The usability of the product has been validated by clinicians in laboratory conditions. Furthermore, over 400 scanners have been deployed worldwide, especially in low-resource settings. The user interface is easy to learn and use within 1-2 days of training for a radiographer. The scanner is approved for sale in more than 50 countries around the world with several installations in emerging markets like India, Vietnam, Bangladesh, Myanmar to name a few.

Operating steps

The scanner has a one time powerup procedure, after which patients are loaded on the patient table and operator positions the patient using the gantry control panel. The CT host computer allows the operator to select a scan, set scan parameters and complete the scan. The console software also allows viewing, post-processing, and reporting. The user interface will be available in several regional languages (Chinese, Italian, Spanish, French, Portugese, Korean, Japanese).

Regulatory status and standards compliance

European Community (CE-mark), CFDA China, AERB India, Bapetan and Ministry of Health Indonesia. Product confirms to the requirements of Medical Device Directive 93/42/EEC and several IEC, ISO, and EN standards.

Use and maintenance

User: Technician.

Training: The user interface is easy to learn and use within 1-2 days of training for a radiographer. The technician is provided with a detailed user manual that provides an explanation of all the key procedures, from startup to calibration and daily usage.

Maintenance/Calibration required: Yes

Environment of use

Setting: Secondary level (general hospital), tertiary level (specialists hospital).

Facility requirements: Specific ambient temperature and/or humidity range, radiation isolation.

Energy requirements: Continuous power supply

Product specifications

Weight (kg): 1 700

Dimensions: 1783mm x 1741mm x 921mm

Lifetime: 5-10 years

In UN catalog: No

Commercial information

Reference price (USD): \$250'000.00

Year of commercialization: 2015

Currently sold in: India, China, Bangladesh, Bhutan, Nepal, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, United Kingdom, Chile, Paraguay, Bolivia, Thailand, Philippines, Vietnam, Myanmar, Indonesia, Malaysia,

Cambodia, Singapore, Morocco, Zambia, Mozambique, Namibia, Botswana, South Africa, Nigeria, Egypt, Kenya, Algeria, Tunisia, Senegal, Chad, Ivory Coast, Zimbabwe, Malawi, Swaziland, Lesotho, Angola, Uganda, Libya, Congo, Democratic Republic Congo, Burkina faso, Niger, Rwanda, Mauritania, Mali, Cameroun, Guinea, Guinea-Bissau, Belize, Guatemala, Honduras, Nicaragua, Panama

Number of units distributed: 101-1 000

Software requirements: Proprietary; advanced software applications can be purchased for specific clinical needs.

Model: GE Revolution ACT

Other features: Reusable (assuming appropriate decontamination and/or other reprocessing between uses)

Contact Srikanth Suryanarayanan | Web <https://bit.ly/2LlftXR>

