

OmniTom® Elite PCD-A Technological Advancement In The Field of Computed Tomography



Photon-counting detector (PCD) is next-generation CT technology that captures CT data in multiple energy bands which results in more precise visualization and segmentation of bone, blood clots, plaque, hemorrhage, and intracranial tumours. It further helps reduce the dosages and fundamentally changes the use of injected contrast.

Contemporary PCD CT Technology is further enhanced with the introduction of OmniTom® Elite PCD scanner. The OmniTom® Elite PCD is the world's first FDA-approved single-source photon-counting CT scanner. It has a single detector on a mobile (Omni-wheel) system allowing intuitive lateral, diagonal and 360° movement, designed to furnish high-quality contrast as well as non-contrast multiple energy level CT, angiography CT, spectral CT images and CT perfusion scans at the point-of-care itself.

This scanner has a high resolution, multi-row, 40 cm bore, and a 30 cm field of view x-ray computed tomography system, which generates multiple CT data sets simultaneously, eliminating any cross-talk between images. The real-time mobile CT imaging goes a long way in speeding the diagnosis and treatment of critical, post-trauma and post-surgical patients while eliminating the need to transport them to a separate imaging zone.

Even when necessary, locomoting the OmniTom® Elite PCD is safer since it is fitted with an electrical drive system, high-tech sensors, a driving camera (to avoid hazards) and a depth-sensing camera with an alarm.

With the removable bed adapter or silhouette scan board, the OmniTom® Elite PCD can accommodate almost any patient, while having them optimally positioned for the scan. The internal lead shielding on the front cover and external lead-free curtains mitigate the risk of scattered radiation exposure for staff and adjacent rooms. The system also has preset dose settings based on the patient's weight and age making it viable for both pediatric and adult imaging.

The OmniTom® Elite PCD system brings in a new era of CT diagnosis in stroke, trauma, ICU and intraoperative neurosurgery settings at the patient's bedside itself and gives an impetus to accuracy in medical treatments (particularly the spine, heart, head and neck).