

What is an i-CAT?



Blending innovation with patient comfort, the i-CAT Cone Beam 3-D Imaging System produces immediate three-dimensional images of a patients' critical anatomy, typically in under one minute. The i-CAT provides complete views of all oral and maxillofacial structures in an easy to use system that allows dental practitioners to dramatically enhance their patient care. The use of an advanced amorphous silicon flat panel image sensor delivers a high image quality and resolution.

i-CAT features an open environment seated position, a typical scan time of only 20 seconds, and significantly lower radiation doses compared to traditional CT scans. The result is a dramatic increase in patient comfort. In addition, the immediate three dimensional reconstruction of a patient's mouth, face and jaw areas enhances doctor/patient communication by allowing doctors to share a visual diagnosis with their patients. This gives patients a better understanding of their treatment options and more confidence when going into treatment.

The i-CAT's high-definition, advanced imaging technology can be used by a variety of specialists, including orthodontists, periodontists, oral surgeons, TMJ specialists and general dentists. With a unique 3-D mapping tool, dentists and technicians are able to format and select desired tooth slices for immediate viewing and further analysis. The 3-D reconstruction gives doctors the opportunity to more thoroughly analyse bone structure, tooth orientation, and joint space, and detect and evaluate deformities and pathologies.

The i-CAT's unique technology provides:

- High resolution scan produces images at 0.2mm voxel size.
- Fast scan time (20seconds) minimises radiation and reduces chances of patient movement during scan—quicker and easier image acquisition.
- Adjustable beam collimation allows full height and targeted field of view scans, providing the ability to further minimise patient radiation.
- Comfort design positions patient in an open environment seated position—allows patient comfort and capture of natural orientation of anatomy.
- Fast reconstruction time provides the most complete views of all oral and maxillofacial structure in real time—produces three dimensional images in typically under 1 minute.
- DICOM 3 Compatible data makes it easy to share and integrate with 3rd party volume data software companies.
- 12 bit Grayscale quality allows more shades of grey to increase contrast for easier viewing.
- Report printout function provides full colour reports with sophisticated clarity and precision.