ENHANCING THE WAY YOU SEE PATIENTS.

Cone Beam 3-D Dental Imaging System
Reduce costs while delivering better results

In-office, three-dimensional imaging is quick, easy, and cost effective

The i-CAT™ Cone Beam 3-D Dental Imaging System provides high-definition, in-office, three-dimensional, digital imaging at reduced cost and less radiation to the patient than traditional CT scans, as well as delivers quicker and easier image acquisition. Its small footprint and economic design allow practices to extend their service offerings and enhance the overall delivery of care, while offering the safest possible diagnostic techniques.

A small size unit delivering high quality imaging

The i-CAT’s design incorporates state-of-the-art digital imaging technology in a unit that makes economic sense, while delivering the quality of imaging demanded by today’s practitioners.

The use of an advanced amorphous silicon flat panel image sensor reduces the overall size of the unit and delivers a higher image quality and resolution.

i-CAT Enhanced Features

Compact Design requires less than 60 square feet of floor space – can fit in place of most existing Pan machines

High Resolution Scan produces images at .2mm voxel size

Fast Scan Time (20 seconds) minimizes 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 minimize patient radiation

Motorized Chair positions patient in an open environment seated position – allows patient comfort and captures natural orientation of anatomy (Wheel Chair Accessible)

Fast Reconstruction Time provides the most complete views of all oral and maxillofacial structure in real-time – produces three-dimensional images in typically under one minute

Easy To Operate point-and-click remote makes the i-CAT easy to use

DICOM 3 Compliant Output makes it easy to share with 3rd party volumetric software companies

14 bit Gray Scale quality allows more shades of gray to increase contrast for easier viewing

Report Printout function provides full-color reports with sophisticated clarity and precision

Priced Affordably leasing options available

I used to order out at least five scans per week. With the i-CAT, I do more scans than before right in my office and close more cases because there’s no delay. The machine pays for itself, and I see a profit with five scans per month; but more importantly, the i-CAT gives my patients peace of mind about their procedures.

L. Scott Brooksby, D.D.S., M.A.C.P.
Las Vegas, Nevada
Three-dimensional views of critical structures for complete TMJ analysis

The i-CAT's ability to provide three-dimensional images of the condyles and surrounding structures allows for complete analysis and diagnosis of bone morphology, joint space, and function — all critical to TMJ dysfunction treatment and care. Ten-second, high-speed scan captures TMJ open jaw views quickly and accurately.

Send volume data to third-party software for 3-D model replacement

Detect restricted airways and determine appropriate treatments

Three-dimensional data enhances airway assessment and can result in reconsideration of the treatment plan if the patient has a typical airway, versus a restricted airway, which may be susceptible to collapse.

Evaluate and analyze critical anatomy for implants and oral surgery within minutes — right in your office

The i-CAT’s high resolution, volumetric images provide complete three-dimensional views of critical anatomy for more thorough analysis of bone structure and tooth orientation to optimize implant treatment and placement, and selection of the most suitable implant type, size, location, and angulations prior to surgery.

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More accurate three-dimensional views of impacted molars

Determine more precise tooth position to visualize impaction within the alveolar bone, location relative to adjacent teeth, and proximity to vital structures, such as the nerve canal, sinus walls, and cortical borders.

Detect and evaluate problems before they become serious

Accurately measure bone and jaw deformities, assess bone lesions and changes of the jaw, and detect other pathologies, such as cysts, tumors, and disease.

Linear measurements

High resolution scans produce images at 0.2mm voxel size for 3rd molars, root canal relationships, small root fractures, periodontal conditions, and any other anatomy requiring detailed visualization.

i-CAT’s Labeling and Measurement Tools

Precise, cross-sectional slices of any desired location in the maxilla or mandible provide exact anatomical information, including dimensions and locations.

Robert W. Emery, D.D.S
Washington, D.C.

Michael Gelbart, D.D.S
New York, NY

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Washington, D.C.

Michael Gelbart, D.D.S
New York, NY

3-D images assist in determining if bone grafting or sinus lift is warranted in areas of insufficient bone for the implant procedure.

Evaluating and analyzing critical anatomy for implants and oral surgery within minutes — right in your office.

The i-CAT opens your eyes to a third dimension. It’s easy to understand and allows you to see critical anatomy that you haven’t previously been able to see. In my opinion, in the near future, all surgeons will need and have an i-CAT. It not only opens the doctor’s eyes, but the patient’s too.

R. W. Emery, D.D.S
Washington, D.C.

Tooth position analysis

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Improving orthodontic diagnosis and treatment

The i-CAT gives today’s orthodontists the tools to improve diagnosis and treatment planning by providing the multiple projection perspective necessary to accurately assess tooth relationships and further support the objective interpretation of anatomy.

Understand exact tooth position and relationship of abnormal anatomy

Three-dimensional imaging technology provides more accurate viewing of impacted supernumerary or abnormal teeth in relationship to other anatomical structures, such as roots, nasal fossa, and sinuses to enhance accurate management of the treatment by understanding the tooth’s position and its relationship to adjacent teeth and structures.

More accurate information can result in less invasive surgery if extracting the tooth and better designs to align the tooth if moving it.

Patients with impacted canines, patients in need of implants, subtle and major asymmetries in orthodontic and orthognathic surgery cases, just to name a few, all can benefit greatly from the i-CAT’s ability to analyze the anatomic truth of the patient’s actual anatomy.

William Harrell Jr, D.D.S.
Alexander City, Alabama

Arm swings open for easy access.

Follow the progress of patient treatment with pre and post analysis scans.

i-CAT Specs

X-ray Source: High Frequency, Constant Potential, fixed anode 120 kVp, 3-8 mA (Pulse mode)
X-ray Beam: Cone
Focal Spot: 0.5mm
Image Detector: Amorphous Silicon Flat Panel, 20 cm x 25 cm
Gray Scale: 14 bit
Voxel Size: 0.4 mm (typical), 0.2 mm (minimum)
Image Acquisition: Single 360 degree rotation
Scan Time: 20 second standard (Options of 10, 20, 40)
Patient Position: Seated
Scan Dimensions: 16 cm (diameter) x 13 cm (height) Optional Extended Field of View: 16 cm (diameter) x 22 cm (height)
Primary Reconstruction: 1 minute for standard 20 second scan
Secondary Reconstruction: Real Time

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