



CS 1600



Introducing the CS 1600 Intraoral Camera
Revolutionary technology.
Superior workflow.



Early caries identification for healthier patients

Earliest caries identification

Early detection is the most efficient way to treat tooth disease. Caries detected in early stages can often be reversed through simple remineralization treatments, allowing your patient to avoid costly and unpleasant restorative procedures in the future. Now, the powerful yet user-friendly CS 1600 aids in the detection of suspicious incipient caries (i.e. "white spots") on both smooth and occlusal surfaces, enabling you to better assess and treat sub-surface lesions and smaller regions (<3mm) of decay.

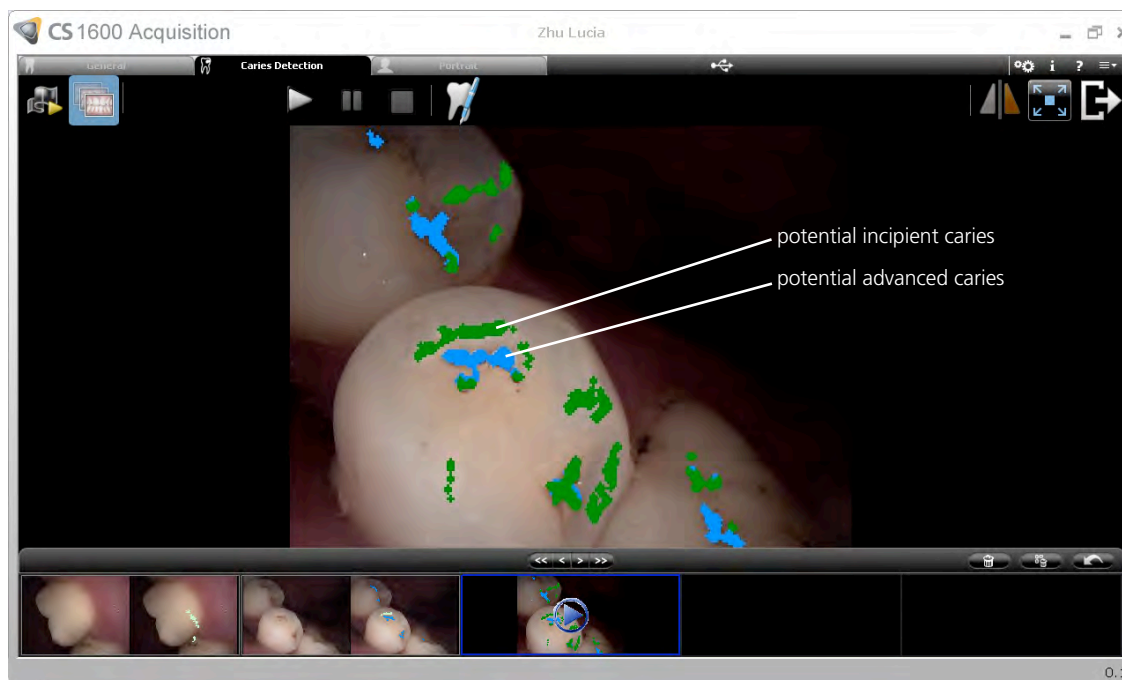
Flexible sensitivity

The CS 1600 also helps identify "brown spot" lesions by visually differentiating potential advanced decay from healthy tooth structures. The ability to detect a wide range of caries formation helps provide greater diagnostic flexibility for you and your team.

Powerful technology with a simple workflow

Caries identification during screening

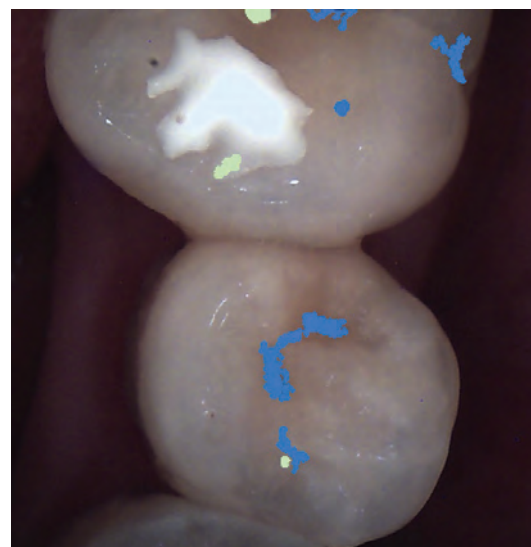
The camera's unique "scan and detect" workflow promotes faster examinations by identifying exact areas of concern during screening. Unlike other devices that require multiple readings for each tooth and force the user to record each result by hand, the CS 1600 provides a streamlined workflow — eliminating cumbersome "pin-point" exam protocols. During the video scanning process, the camera intuitively gathers information from the image and quickly displays it on the monitor, auto-highlighting regions of interest. With the CS 1600, you can quickly capture the data you need without removing the camera from the patient's mouth after each reading.



CS 1600 auto-highlights potential caries lesions during screening.

Innovative FIRE technology

After identifying a potential lesion during video screening, you can then capture still images further analyze suspected caries. Our exclusive FIRE (Fluorescence Imaging with Reflectance Enhancement) technology quickly and safely reveals suspicious lesions in fissures and on smooth surfaces alike.



Capture a still image to further analyze regions of interest.

Enhanced sensitivity for better patient care

Most sensitive detection results

Under violet-blue illumination, teeth naturally emit yellow-green fluorescence. This emitted fluorescence decreases in demineralized tooth regions. Due to increased light scattering, tooth areas with early caries exhibit stronger diffuse reflectance than sound tooth structures — which in turn causes incipient caries to have a “white spot” appearance.

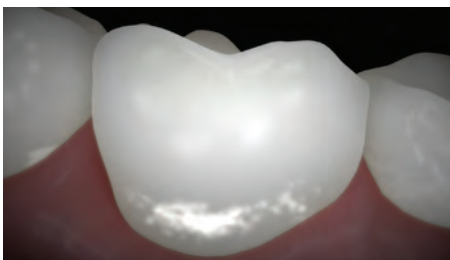
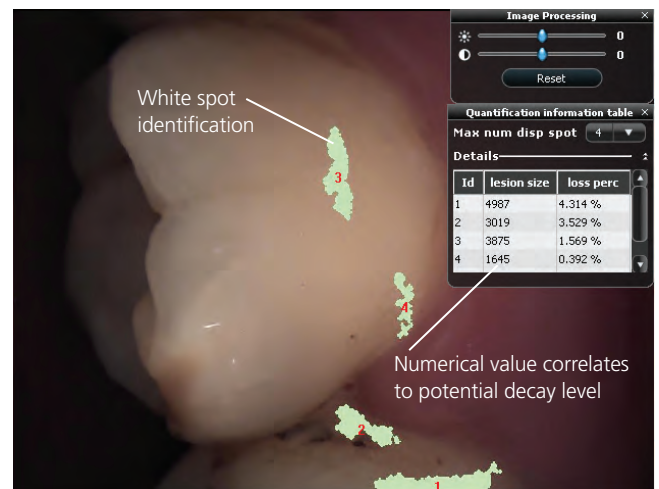
Fluorescence and reflectance effects provide different markers for detection of carious lesions and when taken alone may be too weak to be recognizable. FIRE combines the signals from fluorescence and reflectance to detect incipient caries, providing the most sensitive results.

Analyze spots through quantification

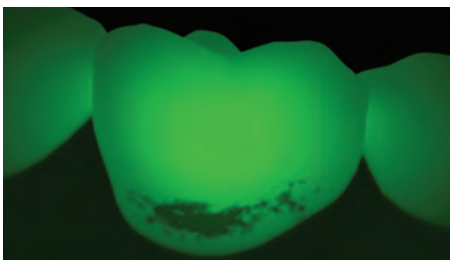
The CS 1600 automatically analyzes suspect white spots on buccal and lingual surfaces for fluorescence loss level and potential lesion size, and lists these levels in a Quantification Information Table adjacent to the displayed image. The potential fluorescence loss values, which may be correlated with demineralization level, are also visually displayed on the identified white spots, further enhancing diagnosis and patient communication.

Proven technology

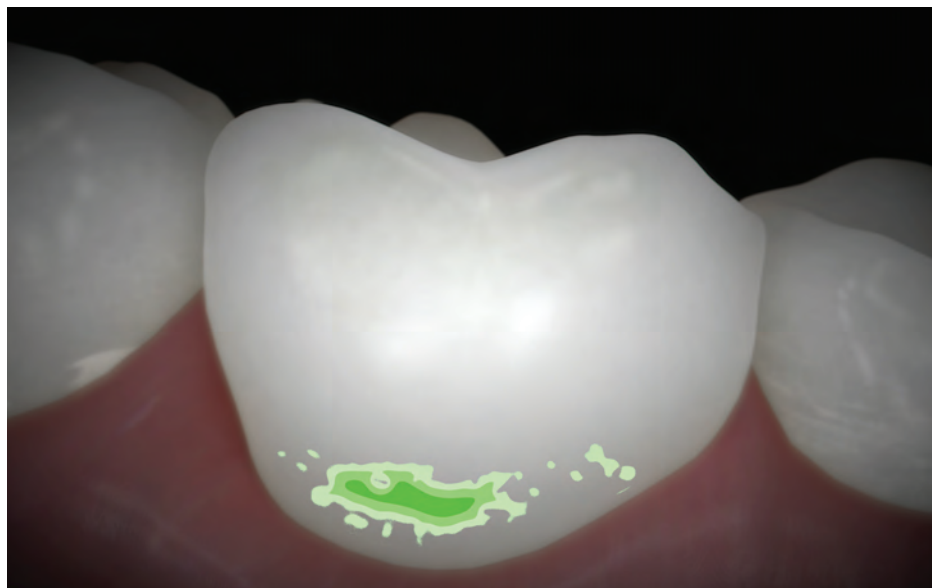
Designed by Carestream’s experienced Research and Development teams, FIRE was validated through extensive clinical studies conducted at the University of Texas Health Science Center at San Antonio. Carestream has acquired several U.S. patents for this technology, with additional patents pending.



Reflectance Effect



Fluorescence Effect



FIRE combines caries signals from both reflectance and fluorescence effects to generate the most sensitive results.

Highest quality images for unparalleled precision

True autofocus, liquid lens technology

Like the human eye, the CS 1600's patented liquid lens automatically focuses according to the distance between the camera and the patient — no manual adjustments required. The result: easier image capture and clearer, more detailed clinical images.

Intuitive illumination system

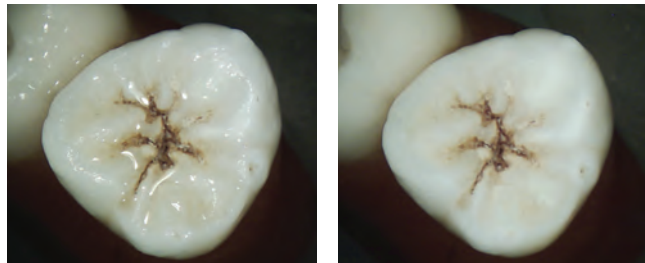
Featuring a three-layer 18-LED lighting system, the CS 1600 delivers consistently powerful illumination. The automatic lighting system intuitively adjusts to your current lighting conditions to deliver optimally



High-tech, three-layer illumination system includes:

- 6 Blue LEDs excite fluorescent light
- 12 White LEDs (6 polarized and 6 unpolarized) produce white light

The optional polarization filter eliminates reflection for more contrasted images.



Capture smile, full-arch, intraoral and macro views.



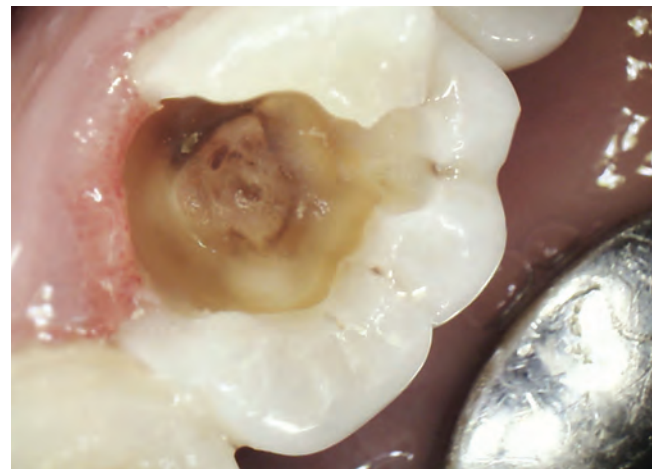
illuminated images in any environment. Meanwhile, the camera's optional polarization filter automatically removes unwanted reflection to ensure more contrasted and true-to-life views.

Versatility at its best

The CS 1600 offers a wide focus range in order to capture both intra- and extraoral images. From full arch to macro views, the camera delivers exceptionally clear images and provides the industry's highest resolution for still images (1024 x 768). And, its independent portrait mode helps you capture stunning patient portraits each and every time.

Magnification to reveal smallest details

Now you can view even minute details easily, including cracks, caries, lesions, and other anomalies. The CS 1600's powerful magnification reveals details unseen by the human eye, even rivaling the endodontic microscope.



Highest image resolution and < 1mm auto-focus technology is ideal for endodontic applications.

A perfect balance of power and simplicity

One-button capture

Easily select camera modes (general, caries detection, or portrait) with just the touch of a button. An indicator light helps identify modes at a glance, while one-click image capture makes acquiring video and still images fast and simple.

Ergonomic elegance

The compact and lightweight CS 1600 has been ergonomically designed and tested to fit comfortably in any user's hands. Two acquisition buttons, located on both the front and back side of the camera, have been strategically placed to promote easy operation for both upper and lower arches. And the stylish and neutral design blends smoothly into any practice décor.

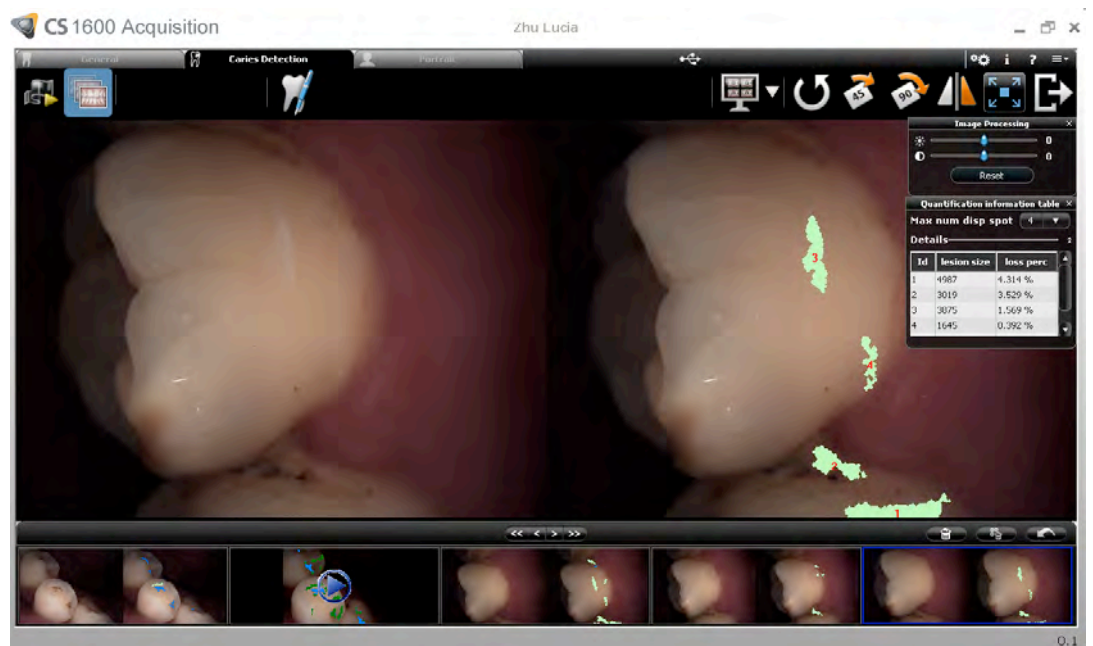
Powerful image processing

The CS 1600 boasts a powerful yet easy-to-use acquisition interface. Capture images, assign tooth numbers, and add notes to images with ease. Images can then be accessed via Kodak dental imaging software or most leading third-party imaging software applications for ongoing storage, retrieval, and management.

Choose from general, caries detection, and portrait modes.



Dual capture buttons allow easy capture of both arches.



Powerful yet easy-to-use acquisition interface.

Multipurpose tool to maximize investment

Twice the functionality

As a convenient 2-in-1 caries identification tool and intraoral camera, the CS 1600 eliminates the need for multiple instruments. Aiding both your diagnostic and patient education needs, the CS 1600 helps you provide a higher level of patient care. What's more, by enhancing your office's reputation as a "high-tech practice," the CS 1600 can also help improve your patients' experience and increase your referral opportunities.



Improved patient communication

The CS 1600 helps you easily communicate patient conditions and treatment options during exams, improving treatment acceptance. You can automatically generate and display results to simplify the diagnostic process and effectively communicate conditions in a way patients truly understand. Stored images also provide comparison data, enabling you to track disease progression or regression and monitor treatment effectiveness over time.

Easy to share and integrate

Convenient "plug and play" USB 3.0 technology makes the CS 1600 the ideal camera to share between operatories. Meanwhile, TWAIN compatibility ensures integration with most leading imaging software programs. And, with its intuitive interface and streamlined design, the CS 1600 is remarkably simple for any team member to use.



Color-coded and numerical display enhance diagnosis and patient communication.

Engineered for success

Backed by expert service and support

Like all Carestream Dental products, both the CS 1600 and Kodak dental imaging software are easy to learn and use, minimizing training time and maximizing practice productivity. And, the CS 1600 is fully backed by expert support and extended warranty programs to further optimize return on investment.

Technical Specifications

Sensor:	1/2.5 CMOS 2592 (H) x 1944 (V)
Video Resolution:	640 (H) x 480 (V)
Image Resolution:	1024 (H) x 768 (V)
Focus Range:	1 mm - infinity
Field of View:	80°
Focus:	Autofocus
Light Source:	3 layer illumination, 6 blue LEDs, 12 White LEDs array
Display Source:	PC
Connection:	USB 2.0 high-speed interface

Smart accessories

The CS 1600 camera comes with all the accessories you need to get started, including a pack of disposable hygienic sheaths, autoclavable collars for aiding caries screenings, and a holder. Ask your local Carestream Dental representative about all available accessories.



Camera holder



Collar for caries detection



Disposable hygienic sheaths



Dual USB cable

Would you like to know more?

Visit www.carestreamdental.com or contact your local authorised dealer.
Want to subscribe to our newsletter? E-mail dentalnews@carestream.com.