

California



Innovative Technology

California was developed to facilitate comprehensive eye exams, document findings, and assist eyecare professionals in disease management and treatment. It produces ultra-widefield (UWF™) **optomap**® images of approximately 82% or 200° of the retina, something no other device is capable of doing in a single capture. The technology has continued to evolve resulting in unrivaled image clarity, from central pole to the periphery, in less than ½ second.

California produces images in multiple modalities including; red/green color (rg), red/green/blue color (rgb), Red-free, Choroidal, autofluorescence (AF), fluorescein angiography (FAF) and indocyanine green angiography (ICGA).

Studies show this fast, easy, patient friendly technology is changing management of diseases including DR, AMD, glaucoma, retinal vascular diseases, dystrophies, degenerations, and inflammatory disorders¹.

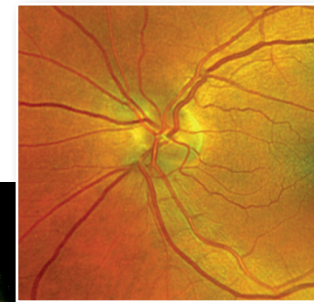
California is available in various device configurations and image modality options for the flexibility to meet the needs and budget of every eyecare practice.



California's patented optical design provides high resolution images showing fine detail whether viewing the entire retina or zoomed in to inspect macula, optic nerve head, or small pathology.



optomap color rg

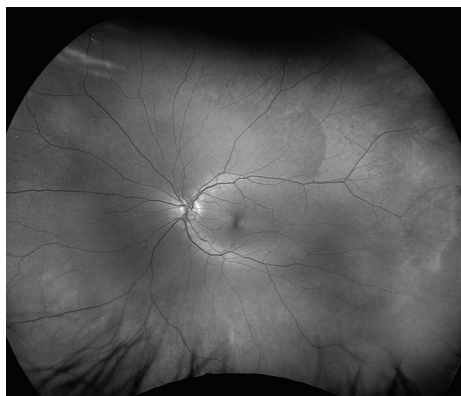


*"The reality is, before **optomap** we didn't know how much pathology was out there in the retina. The multimodality California device has become the standard of care for detection and management of diabetic retinopathy, AMD, and other conditions. Optos imaging captures virtually the entire retina in one shot - it doesn't get much better than that!"*

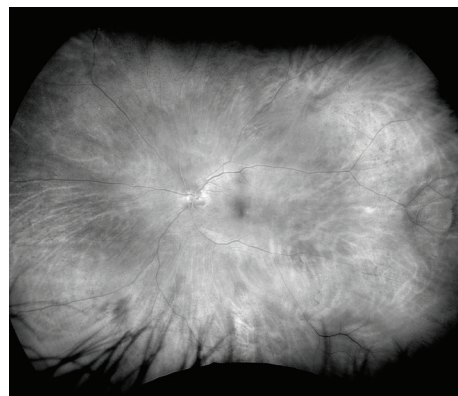
Srinivas Sadda, MD
Los Angeles, CA, US



optomap *color rg*



optomap *Red-free*



optomap *Choroidal*



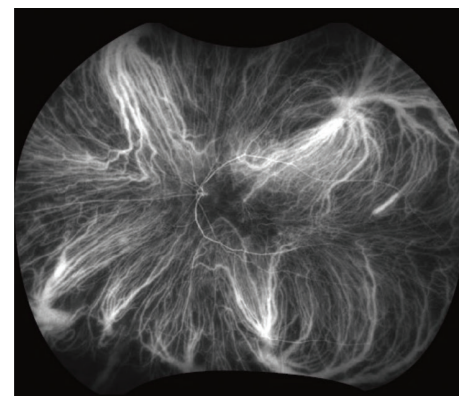
optomap *color rgb*



optomap *af*



optomap *fa*



optomap *icg*

Courtesy of Srinivas Sadda, MD

Unique Features

The only single-capture ultra-widefield retinal image as defined by The International Widefield Imaging Study Group¹.

Non-mydratic retinal imaging in less than ½ second has been shown to decrease patient visit time², enable doctors to see 7% more patients³, and help doctors visualize pathology outside of the view of traditional small field fundus photography⁴.

cSLO technology images through most cataracts⁵ and small pupils (2 mm)⁶.

Color *rg* mode produces 3 images in a single capture: *color rg*, *Red-free*, and *Choroidal*.

Color *rgb* mode (which is available with optional configuration *rgb*) produces 4 images in a single capture: *color rgb*, *color rg*, *Red-free*, and *Choroidal*.

Autofluorescence shows details across the entire retina.

Image overlay tool facilitates comparison of images in different image modes and from visit to visit.

Optos[®] *Advance™* Image Management software streamlines image review, referrals, and consultations.

DICOM compatible software supports compliance with the Code of Federal Regulations^{7,8}.

Accurate distance (mm) and area (mm²) measurements provide objective assessment of change over time⁹.

Stereo disc imaging allows accurate assessment of the optic nerve to diagnose and follow the progression of glaucoma¹⁰.

Auto-montage combines an **optomap** into a single image showing up to 220° (97%) of the retina.

1. Classification & Guidelines for Widefield Imaging Recommendations from the International Widefield Imaging Study Group. Ophthalmology Retina. 2019. 2. Successful interventions to improve efficiency and reduce patient visit duration in a retina practice; Retina, 2021. 3. The Impact of Ultrawidefield Retinal Imaging on Practice Efficiency; US Ophthalmic Review, 2017. 4. Comparison of image-assisted versus traditional fundus examination; Eye and Brain, 2013. 5. Friberg. Advances in retinal imaging of eyes with hazy media: Further Studies. ARVO 2011. 6. Legarreta. Imaging of Peripheral Retina with Optos Ultra-Widefield Imaging: Evaluation of Aperture Size on Image Quality. ARVO 2012. 7. All Covered Entities must securely backup 'retrievable exact copies of ePHI' (CFR 164.308 (7) (ii) (A)). 8. All Data must be backed up off site. HiPAA final security rule (CFR 164.308(a)(7)). 9. Ref Sagong et al. Assessment of Accuracy and Precision of Quantification of Ultra-widefield Images. 10. Haleel. Regional Image Features Model for Automatic Classification between Normal and Glaucoma in Fundus and Scanning Laser Ophthalmoscopy Images. J Med Syst. 2016.

Technical Specifications

MODEL NAME/ NUMBER	P200DTx / A10650		
TRADE NAME	California		
Configuration Name	<i>rg</i>	<i>fa</i>	<i>icg</i>
Optional configuration	rgb*		
IMAGING MODALITIES			
color rg	☒	☒	☒
Red-free (Sensory)	☒	☒	☒
Choroidal	☒	☒	☒
color rgb	☒	☒	☒
Autofluorescence	☒	☒	☒
Fluorescein Angiography		☒	☒
icg Angiography			☒
RESOLUTION	optomap <i>plus</i> : 14 µm, optomap: 20 µm		
LASER WAVELENGTHS	Red laser: 635 nm Green laser: 532 nm (for AF) Blue laser: 488 nm (for FA & RGB color) Infrared laser: 802 nm (for ICG)		
EXPOSURE TIME	Less than 0.4 seconds		
System			
TRIM COLOR	Blue	Gray	Aqua
DEVICE DIMENSIONS	Width: 550 mm / 22 in Depth: 550 mm / 22 in including chinrest Height: 608-632 mm / 24-25 in		
WEIGHT	34 kg/ 75 lbs		
TABLE SPACE REQUIREMENTS (excluding wheel position)	Width: 887 mm / 35 in Depth: 600 mm / 24 in Height: 725 to 1205 mm / 29 – 48 in		
LASER CLASS	Laser safety class-1 following EN60825-1: 2014 and 21 CFR1040.10 and 1040.11		
SYSTEM VOLTAGE	100-240Vac, 50/60Hz		
POWER CONSUMPTION	300VA		
COMMUNICATION PROTOCOL	DICOM Compatible		

- * *color rgb* image modality is available only with optional *rgb* configuration.
- The image modalities boxed together are produced in a single image capture.
 - color rg*, *Red-free* and *Choroidal* modalities will be captured in a single image with all configurations.
 - color rg*, *Red-free*, *Choroidal* and *color rgb* modalities will be captured in a single image with optional *rgb* configuration.
- Specifications subject to change without notice.



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