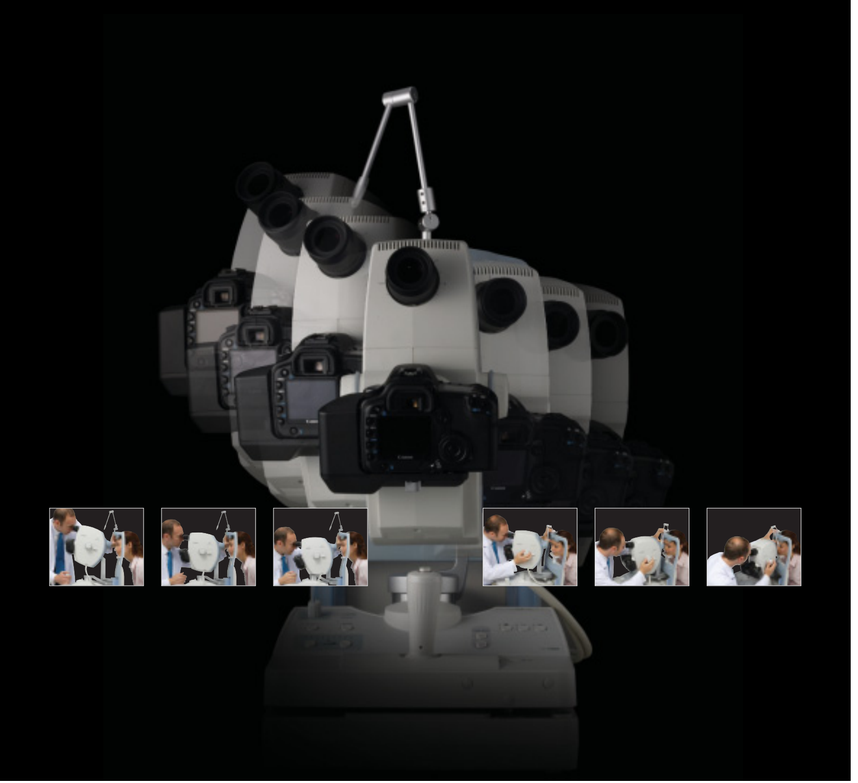


- **Delivers Canon's ultra-high resolution diagnostic images for immediate review**
- **Easy to operate and achieve desired views**
- **Smooth, wide-range pan and tilt movement for maximum flexibility**
- **Exams are more efficient and comfortable for the patient**

CF-1
Digital Retinal Camera



CF-1 Specifications

Type	Digital retinal camera, mydriatic
Types of photography	Color photography, fluorescein angiography (FA), red-free photography, stereo photography (optional)
Angle of view	50 degrees, 43 degrees (2x digital magnification)
Minimum pupil size	ø 5.2 mm (in SP mode: ø 4.3 mm)
Optical image size on the sensor	ø 15.1mm x 13.7 mm
Available digital cameras	Canon EOS digital SLR camera *For information on actual models and specifications, please consult your local Canon sales representative.*
Resolution	Effective pixel count depends on model of attached camera.
Focusing method	Split lines adjustment
Distance adjustment	Working distance dots
Working distance	35 mm
Patient's diopter	Without compensation lens: -10 to +15D With "-" compensation lens: -7 to -31D With "+" compensation lens: +11 to +33D
Light source	Halogen lamp for observation, xenon tube for photography
Eye fixation lamp	External type (standard), internal type (optional)
Range of base movement	Forward/backward: 65 mm, Right/left: 110 mm, Up/down: 30 mm
Panning range	30 degrees to each side (right/left)
Tilting range	Upward: 15 degrees, Downward: 10 degrees
Power supply	AC 100-240V 50/60Hz 7-3A
Power consumption	Normal: approx. 100 VA, Maximum: 720 VA
Operating environment	Temperature: 10˚C to 35˚C Humidity: 30% RH to 80% RH (with no condensation)
Dimensions (W x D x H)	320 mm x 531 mm x 566 mm (12.6 in. x 20.9 in. x 22.3 in.)
Weight	Approx. 26 kg (57 lb.)

COMPONENTS
CF-1 main unit
Power supply cable
External eye fixation lamp
Digital camera cover
Objective lens cap
Dust cover
CD-ROM (Retinal imaging control software MYD)

OPTIONAL ACCESSORIES
Stereo unit
Internal eye fixation target

DICOM COMPATIBILITY
DICOM Storage Service Class (SCU)
DICOM Worklist Management Service Class (SCU)
DICOM Modality Performance Procedure Step (SCU)

Simulated images and specifications are subject to change without notice.

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CF-1
Digital Retinal Camera





Advanced Retinal Imaging Technology Meets Ultimate Ease of Use

Introducing the CF-1, a powerful high-resolution digital retinal camera that's also comfortable and easy to use. For color, red-free imaging and fluorescein angiography.



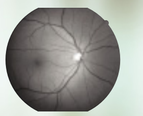
Get the best images for the best diagnosis—quickly, easily and comfortably

In terms of image quality and workflow efficiency, Canon's digital retinal cameras are in a class of their own. Every aspect of image capture—from the precision retinal imaging optics to the advanced digital SLR technology—has been developed in-house to create a seamless, total imaging system that provides unsurpassed diagnostic image quality and speed. The CF-1 takes this a step further with an all-new ergonomic design that makes it easier and more comfortable than ever to achieve precise images during color/red-free imaging and fluorescein angiography.





Color imaging



Red-free imaging



Fluorescein angiography

Industry-leading image quality

The CF-1 integrates a digital SLR camera from Canon's renowned EOS series equipped with a high-sensitivity CMOS image sensor that achieves ultra-high resolution images with superior detail, contrast, and color fidelity. The sensor's high pixel count ensures that images are sharp and clear even when enlarged, and its high sensitivity reduces the amount of light needed for image capture, a factor that helps increase patient comfort during examinations. After capture, images are transferred to the connected PC for immediate on-screen observation.



Intuitive, comfortable operation

The streamlined, ergonomic design of the CF-1 is not only inviting in appearance, it makes the camera a pleasure to operate. It's easily adjustable to comfortably accommodate each examinee. Smooth, precise pan and tilt movement allows you to easily achieve desired views of the retina without requiring the examinee to move their gaze. Alignment and focus is easy as well, helping you to complete exams in less time.



Easy positioning with smooth pan and tilt movement

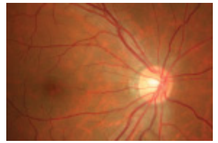


Key features

50-degree angle of view

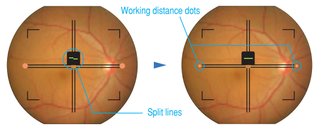
The high-precision Canon optics of the CF-1 achieves wide, extremely detailed retinal images at a 50-degree angle of view. The 50-degree view angle enables easier alignment and focusing, with fewer errors and less flash flare—even with smaller pupil sizes. Additionally, only a low amount of light is needed to capture clear images.

2x digital magnification



With one push of a button on the CF-1 control panel, you can get a closer, more enlarged view of the retina for immediate review on the connected PC. "2x mode" works by automatically cropping out the peripheral edges of the image so that the region of interest is larger in the frame, making it quick and easy to confirm image focus and other factors. The end result looks the same as optical magnification yet is achieved in a fraction of the time. Close-ups are exceptionally clear and detailed thanks to the high pixel count of the integrated digital SLR camera.

Easy alignment and focus



Get clear, sharply-focused images every time in two simple steps. First, align the two halves of a split line using the focusing knob to bring the image into focus. Then adjust the working distance to avoid flash flare by shifting the joystick until the two side dots are clear in the viewfinder.



Ergonomic control panel

Controls for key features—such as shutter release, lamp setting, ISO adjustment, and mode switching—are grouped together for easy one-handed operation in darkened rooms.





Motorized chin rest

The motorized chin rest can be moved up and down to accommodate the examinee's height using a pair of buttons located on the unit's control panel.

Compact, streamlined design

All CF-1 functions are integrated into a single, streamlined tabletop unit with a power supply that's built into the base. The new compact design enables closer face-to-face interaction with the examinee and allows easy access to the examinee's eye. And the detachable digital camera conveniently receives its power through the body of the CF-1, so there's no separate AC adapter to plug in and cables are kept neatly tucked out of the way.

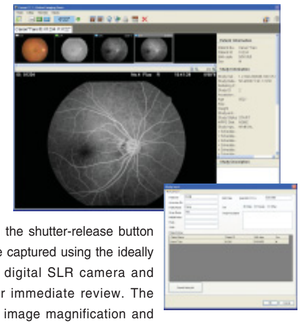


Allows easy access to the examinee's eye

Streamlined system and workflow

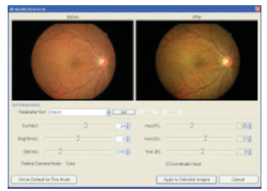
The efficiency of the CF-1 goes beyond image capture. The network capability and control software of the CF-1 work to streamline the entire diagnostic workflow, allowing you to conveniently review, analyze, print, store and even transmit images to remote viewing locations. The DICOM-compliant network interface enables easy integration with existing image management systems and allows connection to a variety of network configurations such as LAN or WAN and PACS communication.

Simple, straightforward control software



The bundled Retinal Imaging Control Software for the CF-1 puts tools for comprehensive study management and image capture control at your fingertips, in an intuitive graphical interface that's simple and straightforward to use. The PC-based software provides quick, easy input and access to information and images required.

A typical exam begins with the input of patient data, which can be automatically received from a DICOM worklist server or manually entered. When the shutter-release button of the CF-1 is pressed, images are captured using the ideally set parameters of the attached digital SLR camera and displayed on the PC monitor for immediate review. The software's preview tools include image magnification and adjustment controls for contrast, brightness, and other factors to aid in image confirmation. When the study is finished, saved images can be printed and automatically transferred to a viewer system.





Workflow of a typical exam

