

Specifications

MAIN UNIT

Type	Digital fundus camera, mydriatic
Types of photography	Color photography, fluorescein angiography (FA), ICG (indocyanine green) angiography (optional), stereo photography (optional)
Angle of view	60 degrees, 40 degrees
Minimum pupil size	ø 4 mm in 40 degree setting (with Small Pupil setting)
Optical image size on the sensor	ø 29 mm x 22 mm
Available digital cameras	Canon EOS Digital SLR camera <i>For information on actual models and specifications, please consult a Canon sales representative.</i>
Resolution	Effective pixel count differs by model of attached camera.
Focusing method	Split pupil adjustment
Distance adjustment	Working distance dots
Working distance	45 mm
Patient's diopter	Without compensation lens: -10 to +12D With "-" compensation lens: -9 to -26D With "+" compensation lens: +11 to +32D
Light source	Halogen lamp for observation, xenon tube for photography
Eye fixation lamp	External type (standard), internal type (optional)
Range of base movement	Forward: 70 mm, right/left: 120 mm, up/down: 38 mm
Panning range	30 degrees to each side (right/left)
Tilting range (optional)	Upward: 15 degrees, downward: 10 degrees
Power supply	110/120, 220/230/240 V AC, 50/60Hz
Power consumption	Approx. 990 VA
Operating environment	Temperature: 10°C to 35°C Humidity: 30% RH to 80% RH (with no condensation)
Dimensions (W x D x H)	Main body: 320 x 560 x 565 mm (12.6 x 22.0 x 22.2 in.) Power control unit: 225 x 380 x 490 mm (8.9 x 15.0 x 19.3 in.)
Weight	Main body: approx. 25.5 kg (56.2 lbs.) Power control unit: approx. 28 kg (61.7 lbs.)

ICG ANGIOGRAPHY (OPTIONAL)

ICG observation on the PC monitor
ICG photography: 1392 x 1040 pixels
(1.45 effective megapixels)

DICOM COMPATIBILITY

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

COMPONENTS

CF-60DSi main unit	1
Power control unit	1
External eye fixation lamp	1
Filter holder	1
Connector cables	1 set
Digital camera control cable	1
RS-232C cable	1
Power cable	1
Objective lens cap	1
Dust cap	1
Dust cover	1
CF-60DSi Control Software	

OPTIONAL EQUIPMENT

ICG camera
ICG camera adapter
Internal fixation unit
Manual tilting unit
Stereo unit



Specifications are subject to change without notice.

Canon

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Canon

CF-60DSi

Digital Fundus Camera

SUPERIOR IMAGING WITH UNMATCHED EFFICIENCY

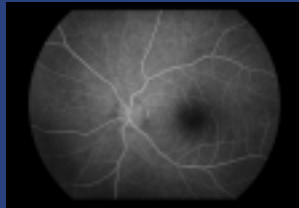
Retinal examinations can now be conducted with greater efficiency than ever thanks to the Canon CF-60DSi, an all-digital system that offers PC-based operation and study management, outstanding digital image quality for color fundus imaging, and high-precision ICG angiography.



LOOK AHEAD TO THE STATE OF THE ART



Color fundus imaging



Fluorescein angiography



ICG angiography

Retinal Imaging Has Never Been Better

In terms of workflow efficiency, the all-digital CF-60DSi is unmatched. That's because all major operations—from worklist retrieval and image capture to DICOM image transfer—can be comfortably handled from a connected PC. More importantly, the CF-60DSi will enable you to manage concurrent examinations with unprecedented ease.

The CF-60DSi also leads in image quality. Working seamlessly with Canon EOS Digital SLR cameras, it delivers exceptionally detailed images during color fundus imaging or fluorescein angiography. Plus there's the option of a new ICG camera unit, which provides both observation and high-resolution image capture for ICG angiography.

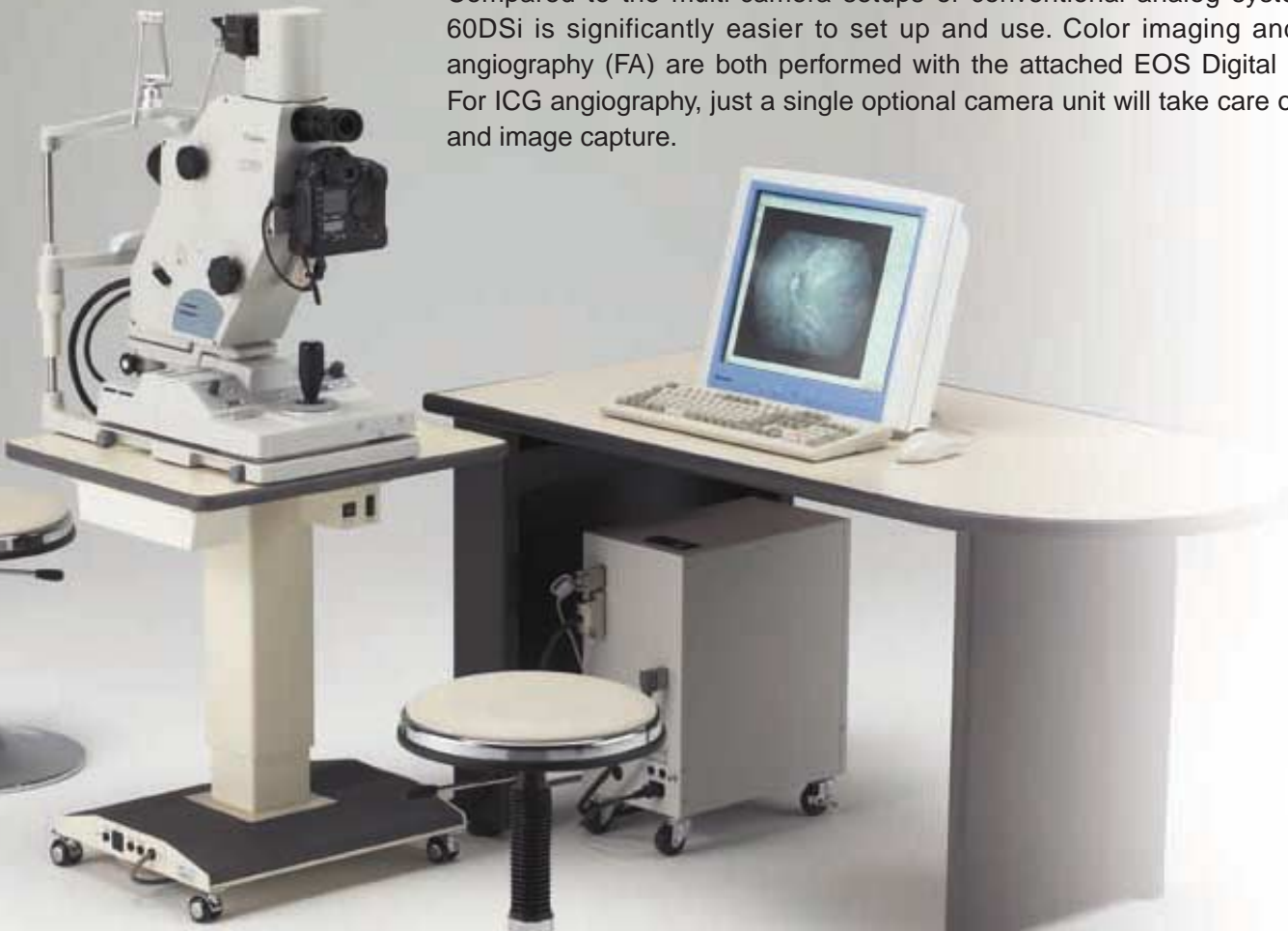
Discover the finest digital solution for retinal imaging, the Canon CF-60DSi.



Streamlined System & Workflow

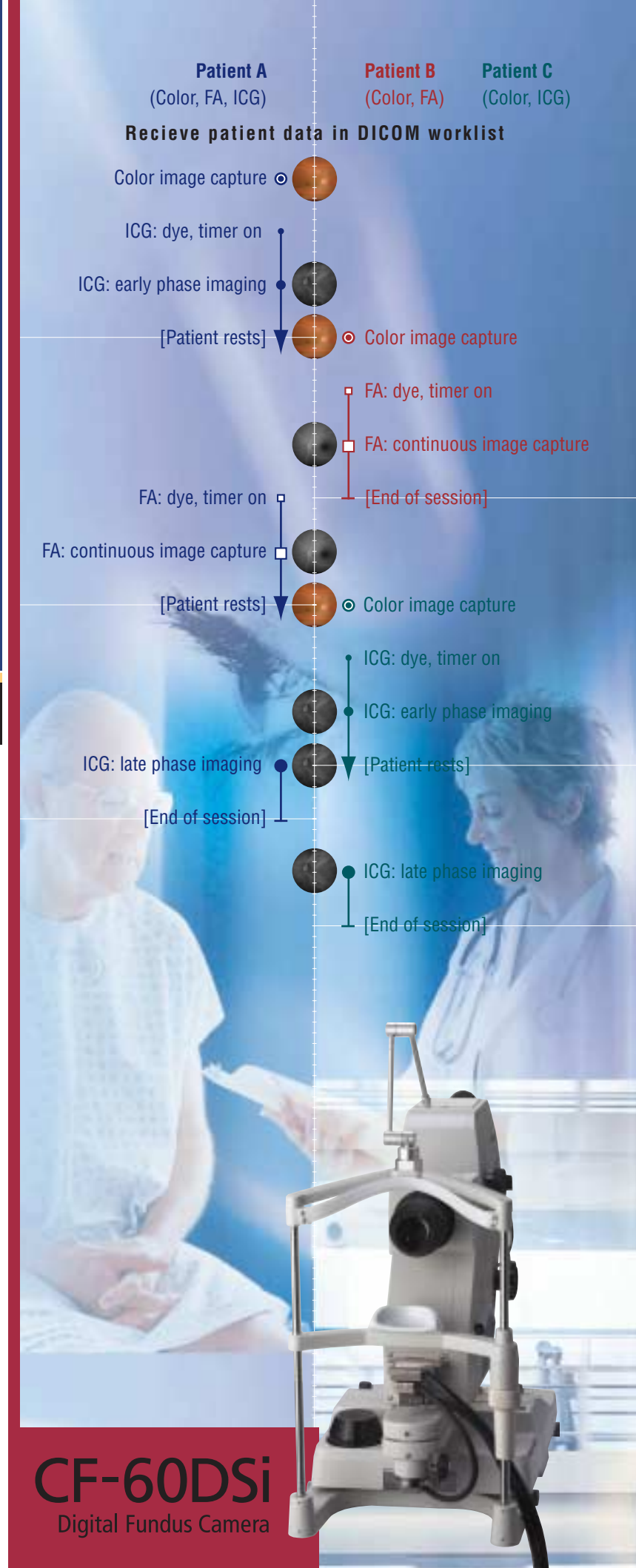
Simple system configuration

Compared to the multi-camera setups of conventional analog systems, the CF-60DSi is significantly easier to set up and use. Color imaging and fluorescein angiography (FA) are both performed with the attached EOS Digital SLR camera. For ICG angiography, just a single optional camera unit will take care of observation and image capture.



Greater overall efficiency

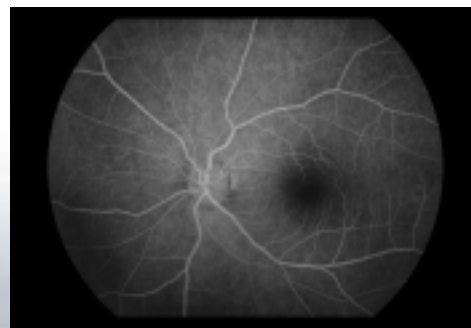
With the all-digital CF-60DSi system, retinal images can be viewed immediately after they are captured, as there is no film development step in the process. This helps you complete a study in less time and results in quicker, more comfortable exams for the patient. But the efficiency of the CF-60DSi extends well beyond the image capture step. Prior to exams, worklists can be received from a DICOM worklist server. And in times of peak demand, the CF-60DSi Control Software lets you easily keep track of camera settings and elapsed time for more than one patient, which ensures that concurrent studies are accurately managed. For every image that is captured, the system assembles the image, patient/study data, camera information, and timer data into a comprehensive medical data file that is ideally suited for diverse image management systems. Once a study has been completed, images can be distributed over a network via the CF-60DSi's DICOM interface. This entire workflow, from start to finish, is far smoother and more versatile than that of any analog fundus camera system.



CF-60DSi
Digital Fundus Camera

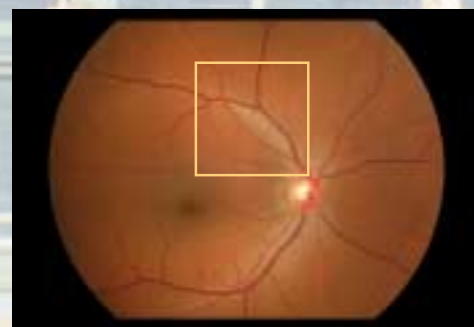
Advanced digital SLR technology

Simply put, for digital retinal imaging there is no combination more powerful than the CF-60DSi and Canon's flagship digital SLR camera. Canon's groundbreaking "full frame" CMOS sensor—the same size as a 35mm film frame—provides unsurpassed detail and contrast with color fundus images or FA. One major benefit of the CMOS sensor's high resolution is that it allows you to see the retina in clear detail even when you enlarge a part of the image, so you'll be able to get a closer look at ocular conditions in practically any situation. In addition, the high sensitivity of the CMOS sensor reduces the amount of light needed for image capture, a factor that helps increase patient comfort during examinations. Canon's advanced camera technology also offers advantages

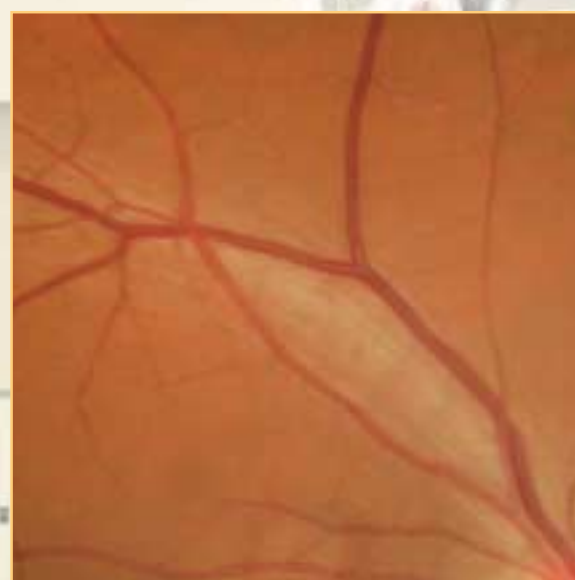


Fluorescein angiography

such as enhanced clarity through noise reduction, fast continuous shooting, and field-proven color reproduction for superb color fidelity.



Color fundus imaging



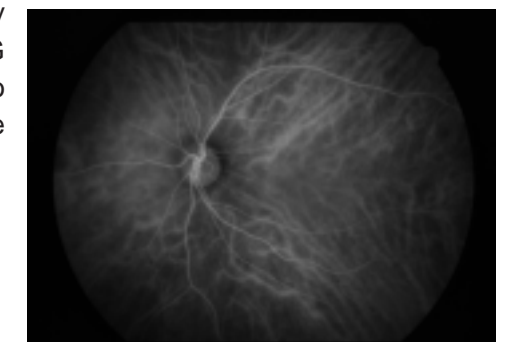
Area enlargement

Digital ICG angiography (optional)



New ICG camera unit

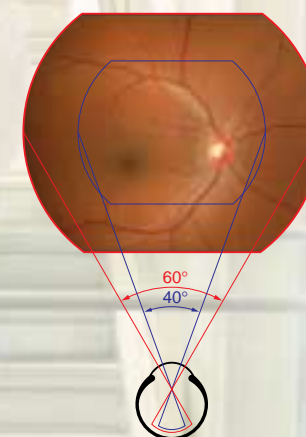
An innovative digital camera unit for ICG (indocyanine green) angiography is available as an option for the CF-60DSi's second camera mount. This new ICG camera combines image capture and observation capabilities in one unit, which makes it easier to set up and operate than conventional multi-camera video systems. Still images are much clearer than those obtained from video systems due to the camera's sensitivity and high resolution (1.45 million pixels). As for observation, the camera is sensitive to near-infrared light and produces a 15 frames per second live image that can be viewed on the connected PC monitor. Communication between the CF-60DSi and ICG camera unit is highly integrated, so there is no need to adjust the camera at each phase of an angiography. The ICG barrier filter is automatically set inside the ICG camera unit to further ensure ease of use.



ICG angiography

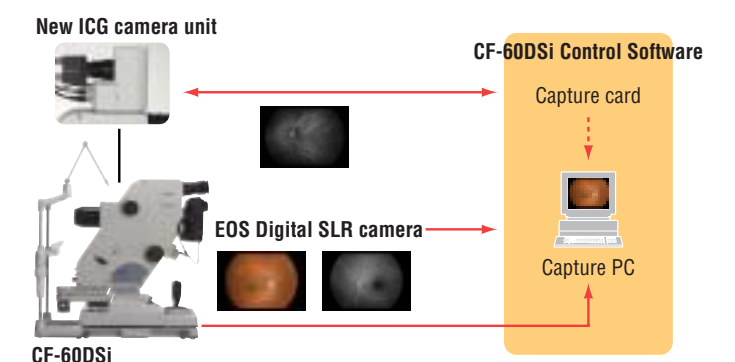
Wider coverage

The CF-60DSi inherits Canon's acclaimed fundus camera optics, which feature a 60-degree setting—the widest viewing angle in the industry. This setting enables you to capture a larger area of the retina during color imaging or FA. The CF-60DSi thus provides tremendous flexibility for your diagnostic needs: a broader view from its optics, and exceptionally detailed close-ups thanks to the high resolution of the attached digital camera.



Centralized operation

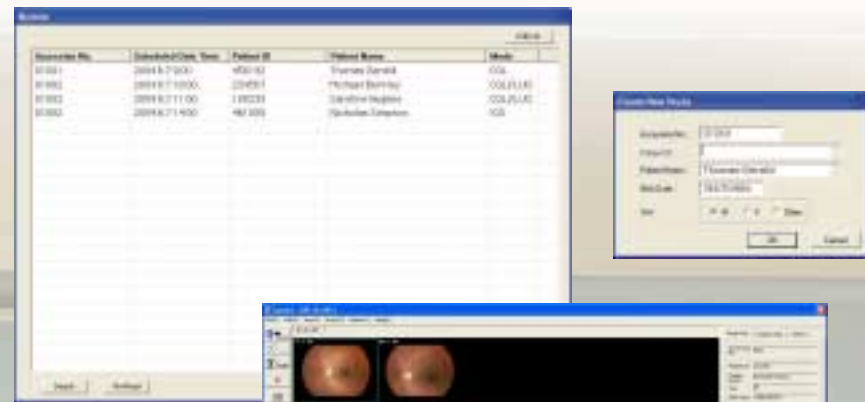
Three types of imaging, two cameras, and one highly effective control center. The CF-60DSi lets you handle most camera operations directly through a connected PC, using the CF-60DSi Control Software. In this system, it is remarkably easy to switch camera modes, capture and view retinal images, and manage each patient's study.



Versatile control software

The CF-60DSi Control Software provides a broad array of features for improving exam room efficiency. You can use it to receive worklists (containing patient data and study orders) from a DICOM worklist server and to manually input patient data if necessary. Once you've selected a study, you can begin capturing images and check them immediately on the PC monitor. Preview tools include image magnification and adjustment controls for contrast, brightness, and other factors.

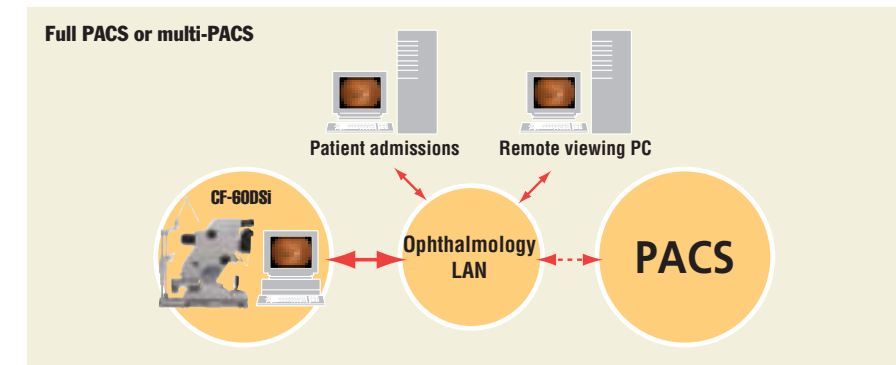
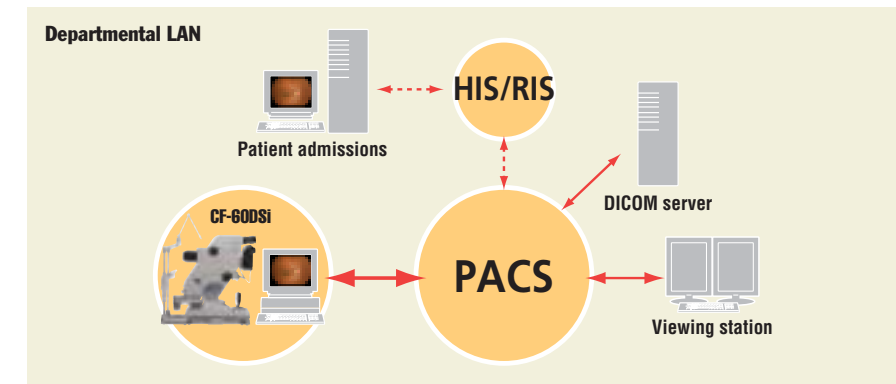
Study management is one of the key strengths of the CF-60DSi. Its software helps you easily switch between studies, types of photography, or patients. Keeping track of camera settings and elapsed time is also simplified. When studies are finished, images can be automatically transferred to a DICOM image server. Local storage and printing are also available with the system.



DICOM-compliant for open connectivity

Over the past several years, DICOM standards for viewing, distributing, and storing images have become widely adopted by the healthcare industry. Canon supports this trend by including a DICOM-compliant network interface as a standard feature of the CF-60DSi. This allows you to connect the CF-60DSi to a wide variety of network configurations, such as departmental LANs and PACS, and ensures the flexibility needed to meet your institution's current and future networking needs.

Please consult a Canon sales representative for more information on specific network configurations.



Many other user-friendly features

Canon ophthalmic equipment is renowned for its ease of use, and the CF-60DSi is no exception. The focusing system features a simple two-step system: first, you align a pair of split lines to bring the image into focus, and then you adjust the working distance to avoid flash flare by checking the dots on either side of the image. This can be done easily even when the room is dark. Furthermore, the CF-60DSi has a joystick that lets you comfortably shift the camera position with one hand and an ergonomic control panel. The panel includes dials for adjusting lamp illumination and flash intensity, and keys for switching between color/FA/ICG modes and setting the exciter or barrier filter for angiography. A Small Pupil mode* is provided for reducing shadows in images captured through pupils as small as 4 mm.

** Available only with the 40-degree camera angle setting.*