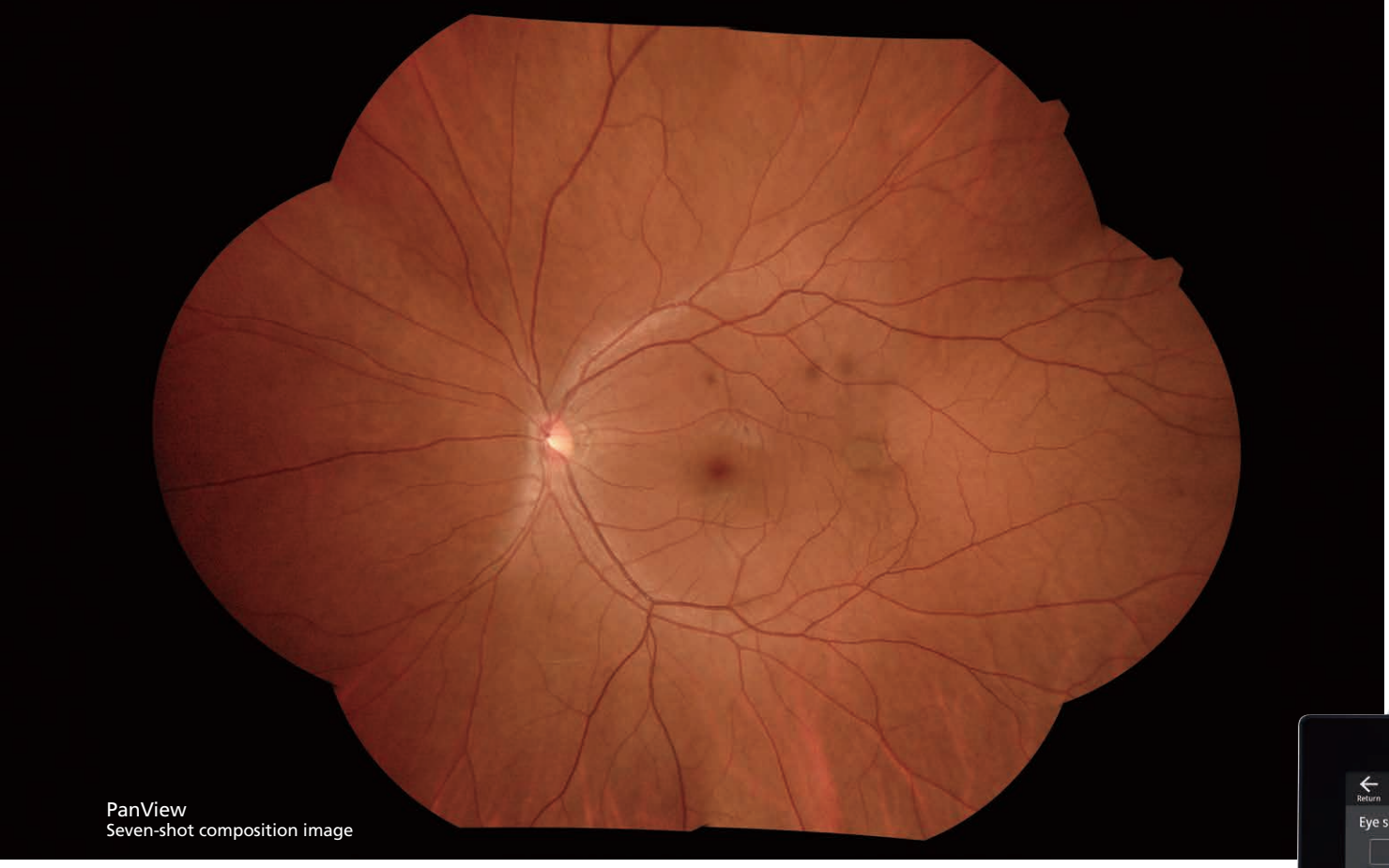
NIDEK

Non-mydriatic Auto Fundus Camera

AFC-1

THE ART OF EYE CARE



PanView
Seven-shot composition image

Wider. Sharper. Seamless.

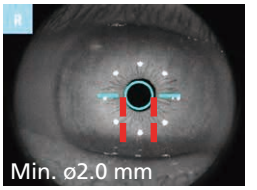
—Panoramic imaging for faster, more reliable screening.

Powered by slit-scan technology, the AFC-1 delivers a high proportion of successful image acquisition—even in small pupils or cataract cases—allowing anyone to capture high-quality images quickly and easily.

This technology enables stable, continuous image acquisition and high proportions of successful panorama compositions. By enabling a wide area of observation in a single view and reducing missed findings, the AFC-1 allows efficient, comprehensive screening, and supports faster, more confident clinical decision-making.

High-contrast imaging even for challenging cases

The advanced slit-scan technology delivers high-contrast, high-definition images with fewer artifacts and shadows. Despite room-light conditions and pupil constriction, it achieves a higher imaging success rate, including in difficult cases, such as cataracts or small pupils (min. ø2.0 mm).

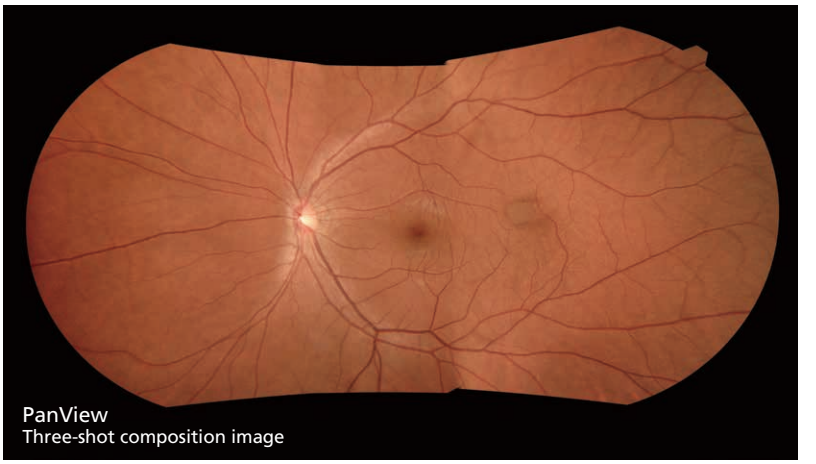


Consistent wide imaging

The AFC-1 captures up to 50° wide fundus images (converted to 74° at the center of the eye). Even in auto small pupil mode, the angle of view remains 50°, ensuring consistent performance for every patient.

PanView—Panorama imaging like never before

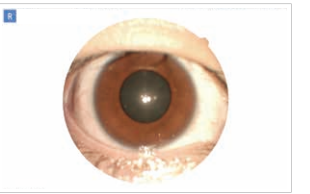
Seamless auto-composite panorama imaging delivers stunning clarity, far surpassing the previous model. The AFC-1 can complete panorama composition quickly on the device, reducing operator time and effort. With the ability to automatically combine up to seven shots, the AFC-1 produces expansive panoramic fundus images of up to 98° (converted to 145° at the center of the eye). Depending on your imaging needs, you can select from two to seven shots.



PanView
Three-shot composition image

Documentation of anterior eye segment

The AFC-1 can capture color images of the anterior eye segment enabling observation and documentation.



Operation for anyone.
Layout anywhere.

Auto functions for universal operation

The five auto functions allow anyone to capture images.
The AFC-1 automatically switches to small pupil mode, contributing to the higher success rate and greater efficiency in clinical workflow.
Additionally, the panorama mode automatically performs continuous image capture and montage.

Auto pupil detection & alignment

▼

Auto small pupil mode

▼

Auto focus & optimizing

▼

Auto image capture

▼

Auto shift to the other eye

Auto multi-shot montage
(Panorama mode)

Manual capture override as required

Automatic functions permit complete image capture in most instances, but manual joystick operation is available to support image acquisition in rare, difficult cases.
Based on your needs, some auto mode options can be turned off. Additionally, the operator can switch to manual operation in the middle of auto capture.

Space-saving design

The continuous range of tilt/swivel of the screen enables placement of the device anywhere in an examination room; installation against a wall or in a corner is now possible.

Installation aligned in an exam room

The AFC-1 enables fundus image capture through small pupils (min. ø2.0 mm), facilitating image capture under various room conditions and layouts.

Flexible data management

The wider connectivity allows flexible data management.

- Direct print
- Direct DICOM
- EyeLink Eye Care Data Management Platform

EyeLink™

EyeLink* files the fundus images captured with the AFC-1.

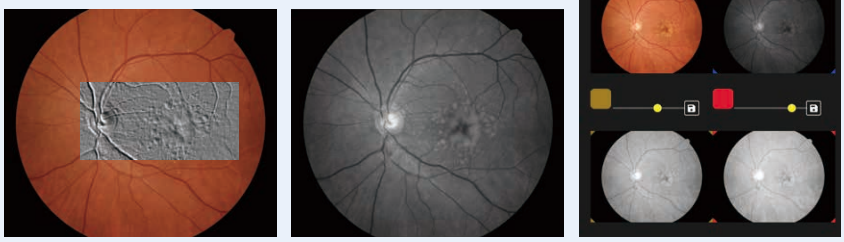
*Product/model name: Eye Care Data Management Platform EyeLink
EyeLink is not included in the AFC-1, sold separately.

Disc/cup measurement

Disc and cup size and C/D ratio can be displayed on the fundus images, allowing quantitative evaluation.

Image processing

Contrast, gamma, brightness, and color can be adjusted as needed.



AFC-1 specifications

Type	Non-mydriatic fundus camera, color
Capture principle	Slit scan
Camera	Built-in 12-megapixel CMOS camera
Light source	LED (red/green/blue)
Minimum pupil diameter	ø2.0 mm (small pupil mode)
Angle of view	Up to 50°
Working distance	24.9 mm (fundus camera) 58.7 mm (color anterior eye image)
Dioptric compensation	-20 to +20 D total
Internal fixation lamp	LED
Device movement range	87 mm (right/left) 32 mm (up/down) 46 mm (forth/back)
Chinrest movement	62 mm (up/down, motorized)
Auto alignment	Pupil detection, X-Y-Z directions
Auto shot	Available
Networking	External PC, DICOM
Display	Tiltable 10.1-inch color LCD, 1280 x 800 pixels (WXGA)
Power supply	100 to 240 V AC, 50/60 Hz
Power consumption	220 VA
Dimensions/mass	303 (W) x 519 (D) x 566 (H) mm / 25 kg 11.9 (W) x 20.4 (D) x 22.3 (H) in / 55 lb
Optional accessories	External fixation lamp

The angle of view measured at the center of the eye: The angle of view measured at the center of the eye is a reference value obtained by converting the field of view specified in ISO 10940:2009 into an angle subtended by the endpoints of the captured area at the center of a simplified eye model. Note that this conversion is based on a simplified approximation and therefore differs in definition from the field of view specified in ISO 10940:2009. The angle of view measured at the center of the eye differs from the actual field of view for image capture.

The field of view of the panorama image: The field of view of the panoramic composition is defined as the single-shot field of view, in accordance with ISO 10940:2009, and the maximum angle that accounts for gaze deviation induced by internal fixation guidance. The actual field of view of the panoramic composition may vary depending on patient fixation, imaging conditions, and image composition parameters.

Product/model name: Non-Mydriatic Auto Fundus Camera AFC-1
Brochure and listed features of the device are intended for non-US practitioners.
The availability of products differs from country to country depending on the status of approval.
Specifications may vary depending on circumstances in each country.
Specifications and design are subject to change without notice.

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