



Pro Photographer

AFC-210

Non-Mydriatic Auto Fundus Camera





Auto Fundus Camera AFC-210

Next Generation Non-Mydriatic Auto Fundus Camera offering High Quality Image and Advanced Operation

NIDEK delivers the innovative non-mydriatic digital fundus camera that integrates every function required for easy retinal screening. Customized built-in functions of the NIDEK AFC-210 improve the quality and efficiency of medical examinations.

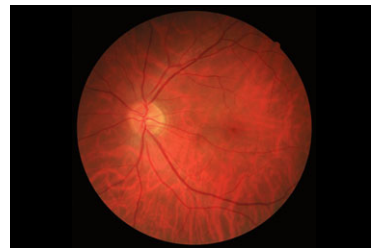


High Quality Retinal Imaging

Integrating the innovative imaging optical system, this technologically advanced AFC-210 realizes digital fundus imaging of high resolution and fine gradation. The fine gradation provides clear and detailed display of the entire fundus image from the light optic disc to a darkened disease area. With noise greatly reduced, the system offers retinal photography with minimum flash exposure allowing quick and efficient fundus photography of both eyes, thereby minimizing patient discomfort.

With advanced optical system with large sensor, the AFC-210 offers high quality image at 45° field view.

Large sensor (36 x 24 mm)



First Non-Mydriatic Camera with Auto Tracking & Auto Focus

NIDEK's advanced auto-tracking technology allows easy and accurate capture of the anterior corneal center. Also, the auto focus system provides automatic switching from anterior to retina, realizing high-performance focusing without touching the joystick. Also included is the unique auto-chinrest feature.

Stress Free Photography Management

The AFC-210's advanced technologies reduce every day problems.

High resolution Image Photography
Always in focus
Cut out retakes
Patient friendly
Quality control Photography
Easy Fast Friendly User operation

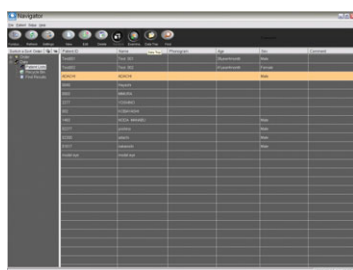
High-Performance Retinal Image Filing System - NAVIS-Lite

The AFC-210 system incorporates the sophisticated and user-friendly data filing software - NAVIS-Lite - allowing easy patient data management.

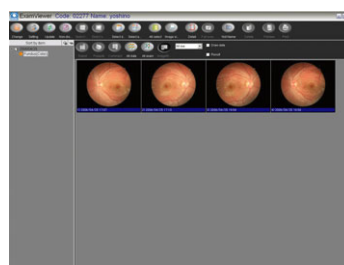
Key Features of NAVIS-Lite

- | Images that are automatically imported from the AFC-210 are sorted by patient name.
- | Easy-care pathway protocols in place for displaying patient information.
- | Sophisticated imaging functions are incorporated, including Image Processing, Drawing, Measurement, and Panoramic Imaging for large field analysis.
 - Zoom : Images can be zoomed freely
 - Effects : Sharp, Combination, Edge enhancement
 - Color control : Grey scale, Contrast RGB, Red-free, Channel split, Color reversal, Brightness, Contrast, Histogram, Gamma control, Selection
 - Rotate / Reverse : Image can be rotated / reversed at any angle
 - Measurement : C / D ratio, Disc HV, Two point separation, Selected occlusion area
 - Drawing : Text / objects can be inserted to the image
- | Flexible print layout display for patient reports
- | Data back-up function
- | Images easily exported
- | Email function is accessible allowing message text with image file attachment
- | The data can be transferred to a DICOM (Digital Imaging and Communications in Medicine) 3.0 compatible server (Optional).

Sample Screens



Patient List



Patient Data



Image Editing



Full-Screen Display

Various System Configurations

1 | Stand-alone-Module



Easy connection with a Laptop or PC using USB2.0 interface.
Quick and easy install to a Laptop or PC using NAVIS-Lite installer.
OS requirement: Windows XP or later version

2 | Communication with Existing Modules

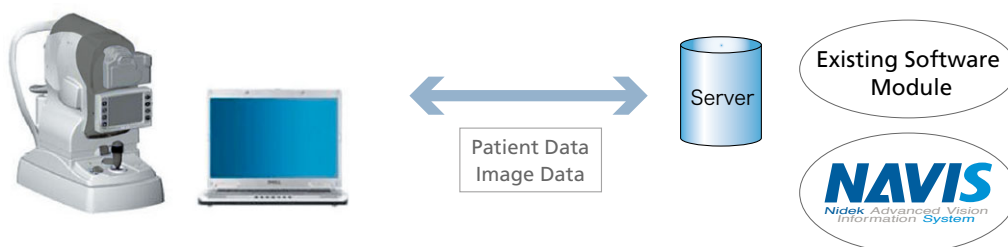
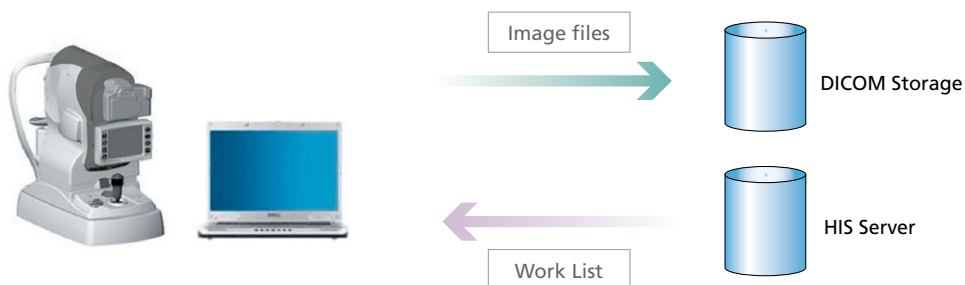


Image files and XML files can be automatically / manually exported with ease to a designated folder.
XML files include information that links the patient data and image files, allowing data export to NAVIS and other existing software modules.

3 | DICOM Connection (Optional)



DICOM connection can be easily achieved. Downloading work lists from the HIS Server is also possible.



Features of AFC-210

Accurate Anterior Eye Observation before Photography

The AFC-210 integrates the 5.7-inch TFT LCD (640 x 480) monitor in addition to the special optic system, CCD camera and high resolution monitor for anterior eye observation, allowing accurate confirmation of the anterior eye status (blepharoptosis, in-growing eyelashes, nystagmus, cataract, corneal disorder, etc). This assures high quality retinal photography.



Flexible Field Angle

Without an adapter, the AFC-210 can provide detailed image of smaller field of view in high quality by utilizing full frame 35mm in 45° field of view.

Unique Blink Control

With the automatic blink detection, the AFC-210 automatically stops the photography when the patient blinks.

Anterior Eye Photography Mode

When pressing the button for anterior eye photography, the AFC-210 automatically switches its mode and provides clear anterior eye photography.

Smaller Pupil Diameter Mode

In addition to the regular minimum Pupil Diameter $\phi 4.0$ mm, the AFC-210 is also highly capable of detecting a smaller Pupil Diameter - Minimum 3.7 mm. When the patient's Pupil Diameter is detected to be smaller than the required 4.0 mm, the AFC-210 automatically switches its mode to the $\phi 3.7$ mm smaller Pupil Diameter mode.

Stereo Mode*

Stereo fundus photography is also possible.

*Requires stereo viewer (optional).

High-Speed Image Transfer to a PC

Connection to a PC through USB 2.0 allows quick and easy transfer of the images. The data can also be saved in an outside electronic chart system through the NAVIS-Lite.

Ergonomic Design for Easy Operation in Darkened Room

Layout of buttons, the lever and the dial is ergonomically designed to allow intuitive operation. The operator can focus on photographing even in a darkened room.



Compact Body

All necessary functions are integrated into this compact body, offering greater portability.



AFC-210 Specifications

Main Body	
Type	Non-Mydriatic Auto Fundus Camera
Picture angle	45° (in smaller pupil diameter mode: 37°)
Working distance	45.7 mm (from camera lens to cornea)
Minimum pupil diameter	ø4.0 mm (in smaller pupil diameter mode: ø3.7 mm)
Display	5.7-inch TFT color LCD
Dioptric compensation for patient' eyes	-33 to +35 D total -33 to -7 D with minus dioptric lens -12 to +15 D with no dioptric lens +11 to +35 D with plus dioptric lens
Focusing method	Infrared split bright target coincidence (Auto / Manual, in -12 to +15 D range)
Light source	
For observation	Halogen lamp 12V 50W with infrared filter
For photography	Xenon Flash lamp (Max. 300 Ws)
Illumination adjustment	17 levels : F1 (F4.0 + 0.7 EV) to F17 (F22 + 0.5 EV) 0.5 EV increments
Internal fixation target	LED (70 points)
External fixation target	Free-arm (optional)
Horizontal movement	40 mm (back and forth) 85 mm (left and right)
Vertical movement	32 mm
Chinrest movement	62 mm (up and down, motorized)
Auto Tracking range	±16 mm (up and down)
Interface	USB 2.0
External camera	High resolution full frame digital SLR camera
Power supply	AC 100-240 V ±10% 50 / 60 Hz
Power consumption	Normal 150 VA, Max. 300 VA
Dimensions / Weight	280 (W) x 505 (D) x 507 (H) mm / 25 kg 11.0 (W) x 19.9 (D) x 20.0 (H) " / 55 lbs.
Standard accessories	Power cord (x1), USB cable (x1), Dust cover (x1), Chinrest paper (x1 pack), Chinrest paper pins (x2), Objective lens cap (x1), Camera body cap (x1), Blower brush (x1)
Optional accessories	NAVIS-Lite, External fixation target, Stereo viewer



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*Specifications and design are subject to change without notice for improvement.



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