





THE ART OF EYE CARE

MP-3 Microperimeter

The Automatic Microperimeter With A Non-mydriatic Fundus Camera

Functionality



NIDEK

MP-3 Normal Eye Image (34 dB)



MP-3 Glaucomatous Eye Image (34 dB)

Morphology

High Resolution Non-mydriatic Fundus Camera

The 12-megapixel fundus camera in the MP-3 acquires high resolution images of retinal pathology and allows easy image acquisition.



Fundus Camera Image

Wide Measurement Range

The MP-3 has a wider range of stimulus intensity, from 0 to 34 dB, compared to the MP-1. The MP-3 measures perimetric threshold values, even for normal eyes. A maximum stimulus luminance of 10,000 asb* allows evaluation of low-sensitivity. *In accordance with ISO12866 measurement methods



There have been significant advances in the assessment of retinal morphology due to the introduction of optical coherence tomography (OCT) into clinical practice, however, functional evaluation of retinal pathology is further advanced with the use of the microperimetry. The MP-3 measures local retinal sensitivity for functional assessment of the retina. The results can be displayed over a color fundus image, correlating retinal anatomy to retinal function.



Automatic Registration (color fundus and microperimetry)

The MP-3 can measure fixation and determine the preferred retinal locus, simply by having the patient fixate on a target. Any change in fixation can be compared pre- and post-treatment because the patient's eye is constantly tracked during microperimetry. This test allows evaluation of fixation in patients with central visual field defects and determines whether fixation improved after treatment.





Fixation Test Image

Evaluation of Treatment



Image of Area Specified Fixation Result



Region-specific Test Evaluation

After completion of measurements, results can be evaluated in a specific region of interest to allow easier comparison with other pathology images. By specifying the region of interest, the average results in the region are displayed.



Magnified Image of Specified Fixation Point

Follow-up Test

A follow-up test can be performed on the same area using the same parameters as a previous test. This feature allows evaluation of disease progression or assessment of pre- and post-treatment outcomes. Any differences in two microperimetry images are displayed for quick, intuitive interpretation.

Fixation Assessment

The MP-3 indicates the percentage of fixation points within 2° and 4° in diameter help confirm fixation stability.



Magnified Image of the Fixation Stability

User-friendly Functions

Selection of Test Mode

Several measurement modes are available for evaluating a variety of pathology including:

- Microperimetry: Microperimetry test (visual sensitivity mapping) Microperimetry test practice
- Retinography: Fundus photography
- Fixation: Fixation test



Start Image



NAVIS-EX

NAVIS-EX is an image filing software that networks the MP-3 and other NIDEK fundus imaging devices.



NAVIS-EX Viewer and MP Viewer

Print Setup

Various printed reports are available including user specified layouts when used with NAVIS-EX.



Print Image

MP-3 Images of Pre- and Post-treatment Comparison

Case of anti-VEGF treatment for age-related macular degeneration (AMD)



Pre-treatment

Circle at 2° Percentage of fixation points 66.1% Circle at 4° Percentage of fixation points 92.1% Mean sensitivity: 20.4



Post-treatment

Circle at 2° Percentage of fixation points 68.1% Circle at 4° Percentage of fixation points 95.5% Mean sensitivity: 20.9

Cases of the Macular Disease



Epiretinal Membrane



Polypoidal Choroidal Vasculopathy



Central Serous Chorioretinopathy



Age-related Macula Degeneration (Geographic Atrophy)



Retinal Angiomatous Proliferation



Excessive Myopia

MP-3 Specifications

Microperimetry	
Visual field	40°
Maximum stimulus luminance	10,000 asb (in accordance with ISO12866 measurement methods)
Background luminance	31.4 asb / 4 asb (in accordance with ISO12866 measurement methods)
Stimulus size	Goldman I/II/III/IV/V compatible
Threshold strategy	4-2 / 4-2-1
Fixation target	Shape: single-cross, circle, four-crosses
	Color: select from white/yellow/red/blue
Fundus Camera	
Туре	Non-mydriatic fundus camera, color
Angle of view	45° \pm 5% (The refraction of the eye is 0 D)
Minimum pupil diameter	ø4 mm
Camera	Built-in 12-megapixel CCD camera
Auto tracking	X-Y-Z directions
Auto shot	Available
Working distance	45.7 mm
Display	10.4-inch color LCD touch screen
Diopter correction range	-25 to +15 D
Fundus auto focus range	-12 to +15 D
Power supply	AC 100 to 240 V
	50/60 Hz
Power consumption	160 VA
Dimensions / Mass	334 (W) x 562 (D) x 560 (H) mm / 36 kg
	13.1 (W) x 22.1 (D) x 22.0 (H) " / 79 lbs.
Optional accessories	Motorized optical table



Product/Model name: Microperimeter MP-3 Brochure and listed features of the device are intended for non-US practitioners. Specifications may vary depending on circumstances in each country. Specifications and design are subject to change without notice.



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