Microperimeter MP-3
US EDITION

Specifications

Product / Model name: Microperimeter MP-3

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Fixation Test
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.

Auto Tracking and Auto Alignment
Automatic Registration (color fundus and microperimetry)

Anterior Auto Tracking + Fundus Auto Focusing

Microperimetry + Fundus Auto Tracking and Auto Alignment

Color Fundus Photography

Auto tracking and auto alignment functions provide more accurate measurements increasing patient and operator comfort and efficiency. These functions allow easy follow-up and reduce variations between examiners, resulting in well-aligned follow up exams.

The Art of Eye Care
The Automatic Microperimeter
With A Non-mydriatic
Fundus Camera

Functionality

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.

*Complies with the ISO 12866 requirements.

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.
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.

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**Evaluation of Treatment**

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**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.

**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.

**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

**NAVIS-EX**

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

**Print Setup**

Various printed reports are available including user specified layouts when used with NAVIS-EX.
**MP-3 Images of Pre- and Post-treatment Comparison**

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

![Pre-treatment Image](image1.png) ![Post-treatment Image](image2.png)

- **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**

- **Epi Retinal Membrane**
- **Age-related Macula Degeneration (Geographic Atrophy)**
- **Polypoidal Choroidal Vasculopathy**
- **Retinal Angiomatous Proliferation**
- **Central Serous Chorioretinopathy**
- **Excessive Myopia**
### MP-3 Specifications

<table>
<thead>
<tr>
<th>Micropereimetry</th>
<th>Visual field</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40°</td>
</tr>
<tr>
<td>Maximum stimulus luminance</td>
<td>10,000 asb (complies with the ISO 12866 requirements)</td>
</tr>
<tr>
<td>Background luminance</td>
<td>31.4 asb / 4 asb (complies with the ISO 12866 requirements)</td>
</tr>
<tr>
<td>Stimulus size</td>
<td>Goldman I / II / III / IV / V compatible</td>
</tr>
<tr>
<td>Threshold strategy</td>
<td>4-2 / 4-2-1</td>
</tr>
<tr>
<td>Fixation target</td>
<td>Shape: single-cross, circle, four-crosses</td>
</tr>
<tr>
<td>Color: select from white / yellow / red / blue</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fundus Camera</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-mydriatic fundus camera, color</td>
</tr>
<tr>
<td>Angle of view</td>
<td>45° ±3° (The refraction of the eye is 0 D)</td>
</tr>
<tr>
<td>Minimum pupil diameter</td>
<td>ø4 mm</td>
</tr>
<tr>
<td>Camera</td>
<td>Built-in 12-megapixel CCD camera</td>
</tr>
</tbody>
</table>

| 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 |

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