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

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

MP-3 Specifications

- **Product / Model name**: Microperimeter MP-3
- **This product is not cleared by the FDA for distribution in the United States.**
- **Specifications may vary depending on circumstances in each country.**
- **Specifications and design are subject to change without notice.**

Fixation Test Image

MP-3 Image

There have been significant advances in the assessment of retinal morphology due to the introduction of Optical Coherence Tomography into clinical practice; however, functional evaluation of retinal pathology is further advanced with the use of 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.
**Morphology**

**High Resolution Non-mydriatic Fundus Camera**

The 10-megapixel fundus camera in the MP-3 acquires high-resolution images of retinal pathology and allows easy image acquisition.

**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 parafoveal central sensitivity, even for normal eyes. For example, the intensity of 10,000 cd/m² allows evaluation of low-sensitivity.

**Evaluation of Treatment**

After completion of measurement, results can be evaluated in a specific region of interest. Image results are displayed on the screen, and differences in two microperimetry images are highlighted for quick, intuitive interpretation.

**Follow-up Test**

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

**Fixation Assessment**

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

**Region-specific Test Evaluation**

Results can be evaluated in a specific region of interest to allow easier comparison with other pathology images. By specifying the region of interest, final results of the test in the region are displayed.

**Print Setup**

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

**Cases of the Macular Disease**

- Epiretinal Membrane
- Age-related Macula Degeneration (Geographic Atrophy)
- Polypoidal Choroidal Vasculopathy
- Retinal Angiomaatous Proliferation
- Excessive Myopia
- Central Serous Chorioretinopathy
- Neovascularization of PVR

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

Case of anti-VEGF treatment for age-related macular degeneration (AMD).
Microperimeter
MP-3

MP-3 Specifications

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.

Auto Tracking and Auto Alignment

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.

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.

Fixation Test Image

MP-3 Image
The Automatic Microperimeter With A Non-mydriatic Fundus Camera

**MP-3 Microperimeter**

**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.

- **Evaluation of Treatment**
  - After completion of measurements, results can be evaluated in a specific region of interest to show under 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 therapy progress 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, helping confirm fixation stability.

**User-friendly Functions**

- **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.

**Print Setup**

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

**Cases of the Macular Disease**

1. **Excessive Myopia**
2. **Central Serous Chorioretinopathy**
3. **Epi Retinal Membrane**
4. **Age-related Macular Degeneration (Geographic Atrophy)**
5. **Polypoidal Choroidal Vasculopathy**
6. **Retinal Angiomatous Proliferation**
7. **Excessive Myopia**

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

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

**Follow-up Image**

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

**Image of Area Specified Fixation Result**

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

**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.

**Print Setup**

- Various printed reports are available including user-specified layouts when used with NAVIS-EX.
The Automatic Microperimeter
With A Non-mydriatic Fundus Camera

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. It automatically determines the standard stimulus of 10,000 asb* for the evaluation of low sensitivity.

Evaluation of Treatment
After completion of measurements, results can be evaluated in a specific region of interest to allow easy comparison with other pathologies. By specifying the region of interest, the fixation 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 observation of disease progression or assessment of pre-treatment 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 to confirm fixation stability.

Region-specific Test Evaluation
After completion of measurements, results can be evaluated in a specific region of interest to allow easy comparison with other pathologies. By specifying the region of interest, fixation results in the region are displayed.

User-friendly Functions
Several measurement modes are available for evaluating a variety of pathologies, including Microperimetry (microperimetry), Fixation test, Retinography, and several other NIDEK Fundus imaging devices.

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

Cases of the Macular Disease
- Excessive Myopia
- Central Serous Chorioretinopathy
- Epiretinal Membrane
- Age-related Macular Degeneration (Geographic Atrophy)
- Polypoidal Choroidal Vasculopathy
- Retinal Neovascularization
- Central Venous Choroidal Stenosis
- Branch Retinal Vein Occlusion

MP-3 Images of Pre- and Post-treatment Comparison
Case of anti-VEGF treatment for age-related macular degeneration (AMD)

Fixation Image
Follow-up Image
Follow-up Image
Follow-up Image

MP-3 Normal Eye Image (34 dB)
MP-3 Glaucomatous Eye Image (34 dB)

Mean sensitivity: 20.9
Percentage of fixation points 68.1%
Percentage of fixation points 82.1%

Start Image
End Image

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 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.

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 and whether fixation improved after treatment.

Auto Tracking and Auto Alignment

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.

**MP-3 Specifications**

- **View 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)
- **Threshold strategy**: 4-2 / 4-2-1
- **Fixation target**: Shape: single-cross, circle, four-crosses
- **Color**: Select from white/yellow/red/blue
- **Type**: Non-mydriatic fundus camera, color
- **Angle of view**: 45° ±5% (The refraction of the eye is 0 D)
- **Minimum pupil diameter**: ø4 mm
- **Camera**: Built-in 12-megapixel CCD camera
- **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
- **Power consumption**: 50/60 Hz, 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

Microperimeter MP-3

**Brochure and listed features of the device are intended for non-US practitioners.** Specifications may vary depending on or in accordance with each country. Specifications and design are subject to change without notice.