Nidek’s MP-1S is a retinal function analyzer that, along with its accurate retinal tracker, correlates a precise fundus topography and light-sensitivity map on any selected area of the retina. The MP-1S is designed to obtain multiple retinal analysis on patients with any visual acuity level.

**FUNDUS RELATED PERIMETRY**

The MP-1S improves diagnostic accuracy by quantifying and qualifying functional response of selected retinal areas. The combination of subjective (sensitivity map) and objective (retinography) data is unified on a microperimetry map, allowing a straightforward analysis of the retinal function before and after any clinical or surgical treatment, helping the physician to improve the diagnosis accuracy.

**FIXATION ANALYSIS**

Fixation characteristics are critical for retinal analysis. The MP-1S offers exact fixation quantification, location and stability.

**PRECISE FOLLOW-UP EXAMINATION**

Administering the exact same exam on exactly the same retina point over time allows qualification of quality of vision after any pharmacological or surgical treatment. Therapeutic includes the low vision practitioners. Dedicated differential maps are available to fast highlight the retinal changes both for microperimetry and fixation exams.

**LOW-VISION REHABILITATION**

With the biofeedback exam, low-vision patients who have lost foveal fixation capabilities are trained to relocate their preferred retinal locus (PRL) into a different region, called trained retinal locus (TRL), previously decided by the physician, allowing fixation rehabilitation and recovering visual abilities (i.e. reading speed) thanks to the increase of fixation stability and visual outcomes.

**SCOTOMA TRACKER**

The high-precision kinetic exam of the MP-1S easily finds the shape of a scotomatous area due to rapid identification of the size and shape of even the smallest scotomas.

**DIFFERENT RETINAL TECHNOLOGIES**

The MP-1S allows overlapping of the sensitivity map on imported images taken with retinal systems performing FAG, ICG, IR, OCT and others.
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STANDARDIZED INTERPRETATION

Normal Values & Local Defect Map

The local Defect Map allows plotting the differences in dB between measured thresholds and age-corrected normal values at each stimulated location, within 20° centered on the fovea.

- Normal
- Suspect
- Relative scotoma
- Normality data not available
- Absolute scotoma
- Not projected

Improved Fixation

Visual rehabilitation through the biofeedback exam allows change of the previous fixation location (PRL – Preferred Retinal Locus) into an area with better sensitivity (TRL – Trained Retinal Locus).

The typical protocol is using MP-1S to:
- Find actual fixation location
- Perform microperimetry analysis
- Locate highest sensitivity region
- Train new fixation location

Customize MP Exams to Fit All Needs

Merge Images from Any Source

Monitor Patient Improvement

Increase Reading Ability

Quality of Vision Quantified

Fixation Stability Quantified

Monitor Patient Improvement

Increase Reading Ability

Customize MP Exams to Fit All Needs

Merge Images from Any Source
**MP-1S Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projection System</td>
<td>Internal LCD</td>
</tr>
<tr>
<td>Weight</td>
<td>26 kg / 57 lbs</td>
</tr>
<tr>
<td>Internal Fixation</td>
<td>Single or four crosses, circle – customizable</td>
</tr>
<tr>
<td>Field of View</td>
<td>45°</td>
</tr>
<tr>
<td>Background Luminance</td>
<td>1.27 cd/m² (= 4 asb)</td>
</tr>
<tr>
<td>Stimulus Dimension</td>
<td>Goldmann I, II, III, IV, and V</td>
</tr>
<tr>
<td>Stimulus Duration</td>
<td>From 100 ms to 2000 ms</td>
</tr>
<tr>
<td>Threshold Strategies</td>
<td>4-2-1, 4-2, fast, raw, manual</td>
</tr>
<tr>
<td>Stimulus Pattern</td>
<td>User customizable</td>
</tr>
<tr>
<td>Joystick</td>
<td>3-axes motion control</td>
</tr>
<tr>
<td>PC</td>
<td>For OS: Windows 7 SP1, Intel Pentium G3460 at 3.5GHZ HD 500GB and Ram 4 GB</td>
</tr>
<tr>
<td>Storage</td>
<td>HD / DVD</td>
</tr>
<tr>
<td>Display</td>
<td>19&quot; SXGA LCD</td>
</tr>
<tr>
<td>Light Source</td>
<td>Quartz halogen lamp 12V/50W</td>
</tr>
<tr>
<td>Class</td>
<td>Type 1BF (according to IEC 601-1)</td>
</tr>
<tr>
<td>Power</td>
<td>100 to 120 and 200 to 230 VAC 50/60 Hz</td>
</tr>
</tbody>
</table>

Caution: U.S. Federal Law restricts this device to sale, distribution and use by or on the order of physician or other licensed eye care practitioner.

Specifications may vary depending on circumstances in each country.

Specifications and design are subject to change without notice.