

# Refractive Power / Corneal Analyzer OPD-Scan III (VS)





**Experience** the Visual System

The OPD-Scan III VS is an aberrometer providing optimal and facilitated eyeglass prescription with detailed measurement data.

The easy-to-understand reports displayed on a tablet allow simple explanation of examination results.

This unit opens a variety of business possibilities as a new communication tool.



## **Comprehensive Vision Analysis**

OPD-Scan III VS is a device that mainly measures corneal shape (topographer) and refractive error (refractometer).

It clarifies causes of vision difficulties through wavefront analysis of information measured over a wide area.



#### **Wavefront Aberrometer**

Unprecedented assessment of visual acuity and quality of vision.

## Topographer

Intuitive maps and numerical data of the corneal surface.

#### Auto Refractometer

Exceptionally accurate refraction for various pupil diameters even under photopic and mesopic conditions.

### **Auto Keratometer**

Conventional keratometry and novel corneal surface descriptors.

### Pupillometer

Measurement of photopic and mesopic pupil diameters.

# Superior Examination with NIDEK RT

By communicating with NIDEK RT, the high quality measurement and fast examination provide for an even more enhanced experience. The report image can be displayed on the large control console screen of the RT-6100.





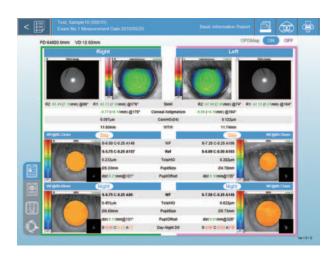
# **Solutions for Face-to-face Consulting**

Tablet viewer provides four kinds of easy-to-understand reports for explanation and consulting.



## **Basic Information Report**

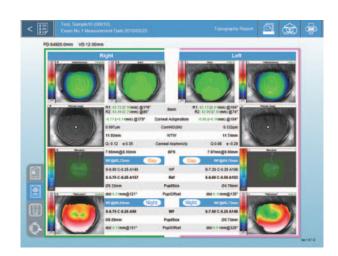
Basic information to generally judge the patient's eye conditions.





## **Topography Report**

Intuitive maps and numerical data for comprehending the corneal surface.





## **Simulation Report**

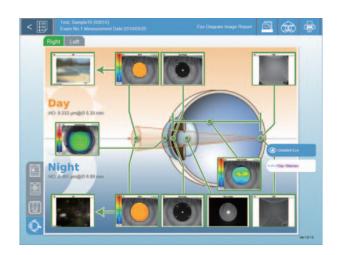
Visual performance simulations and MTF graphs for a variety of conditions.



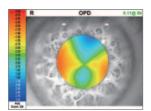


## Eye Diagram Image Report

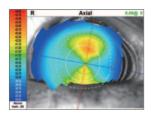
Eye model to visually understand eye conditions ranging from eye fundus to cornea.



# Wide Range of Display Patterns



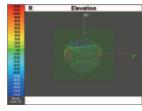
OPD map Distribution of refractive power



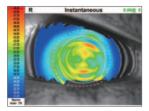
Axial map
Distribution of corneal
curvature radius / corneal
refractive power



Placido image Placido ring image



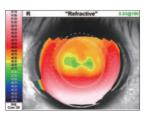
Elevation map Simulation of the difference in elevation between cornea and overlaid reference sphere



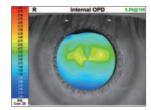
Instantaneous map
Distribution of corneal
curvature radius /
corneal refractive power



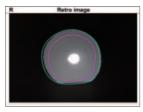
Eye image Image of anterior eye segment



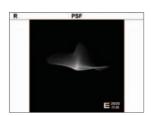
"Refractive" map
Distribution of corneal surface
refractive power



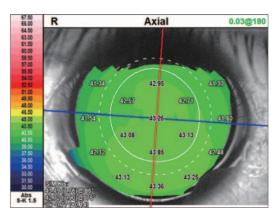
Internal OPD map Distribution of internal eye refractive error



Retro image Retroillumination image

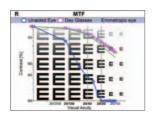


PSF (Point Spread Function) map Simulation of how the point-source light appears to the patient



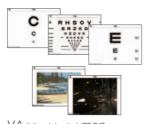
Additional indication

Text and numerical data display on some maps for more detailed confirmation.



 $\begin{array}{l} MTF \text{ (Modulation Transfer Function)} \\ graph \end{array}$ 

Graph of contrast analysis



VA (Visual Acuity) map Simulation of how the VA chart appears to the patient

\*Landolt/ETDRS/Snellen/Image charts

## **OPD-Scan III** Specifications

Wavefront aberrometer	
Measurement principle	Automated objective refraction (dynamic skiascopy)
Spherical power range	-20.00 to +22.00 D
Cylindrical power range	0 to ±12.00 D
Axis range	0 to 180°
Measurement area	ø2.0 to 9.5 mm (7 zone measurement)
Data point	2,520 points (7 x 360)
Map type	OPD, Internal OPD, PSF, MTF graph, Visual Acuity
Гороgrapher	
Measurement rings	33 vertical, 39 horizontal
Measurement area	ø0.5 to 11.0 mm (R = 7.9 mm)
Data point	11,880 points and more
Map type	Axial, Instantaneous, "Refractive", Elevation
Auto refractometer	
Measurement range	Sphere -20.00 to +22.00 D
	Cylinder 0 to ±12.00 D
	Axis 0 to 180°
Minimum measurable pupil diameter	ø2.6 mm
Auto keratometer	
Measurement range	Curvature radius 5.00 to 10.00 mm
	Refractive power 33.75 to 67.50 D (n = 1.3375)
	Astigmatism 0 to ±12.00 D
	Axis 0 to 180°
Measurement area	ø3.3 mm (R = 7.7 mm)
Pupillometer/Pupillographer	
Measurement diameter	1.0 to 10.0 mm
Image type	Photopic, Mesopic
Auto tracking	X-Y-Z directions
Display	10.4-inch color LCD touch screen
Printer	Built-in thermal type line printer for data print
Interface	RS-232C, LAN: 1 port each
	USB: 4 ports
Power supply	100 to 240 V AC
	50/60 Hz
Power consumption	110 VA
Dimensions/Mass	284 (W) x 525 (D) x 533 (H) mm / 23 kg
	11.2 (W) x 20.7 (D) x 21.0 (H)" / 51 lbs.
Standard accessories	Printer paper, Power cord, Dust cover, Chinrest paper, Fixing pins for chinrest paper, Spherical model eye, Touch pen,
	Touch pen stand, Ferrite core, Installation CD for OPD Web Viewer System, Installation manual for OPD Web Viewer System
Optional accessories	Communication cable, Eye Care card system, Barcode reader, Magnetic card reader

Product/model name: REFRACTIVE POWER / CORNEAL ANALYZER OPD-Scan III 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. The tablet described in this brochure is not included or sold with the OPD-Scan III VS.



HEAD OFFICE (International Div.) 34-14 Maehama, Hiroishi-cho, Gamagori, Aichi 443-0038, JAPAN TEL: +81-533-67-8895 URL: www.nidek.com [Manufacturer]

TOKYO OFFICE (International Div.) 3F Sumitomo Fudosan Hongo Bldg., 3-22-5 Hongo, Bunkyo-ku, Tokyo 113-0033, JAPAN

TEL: +81-3-5844-2641

URL: www.nidek.com

NIDEK INC. 2040 Corporate Court, San Jose, CA 95131, U.S.A. TEL: +1-408-468-6400 +1-800-223-9044 (US Only) URL: usa.nidek.com

NIDEK S.A. Ecoparc, 9 rue Benjamin Franklin, 94370 Sucy En Brie, FRANCE TEL: +33-1-49 80 97 97

URL: www.nidek.fr

Via dell'Artigianato, 6/A, 35020 Albignasego (Padova), ITALY

TEL: +39 049 8629200/8626399 URL: www.nidektechnologies.it

NIDEK TECHNOLOGIES S.R.L. NIDEK (SHANGHAI) CO., LTD. Rm3205,Shanghai Multi Media Park, No.1027 Chang Ning Rd, Chang Ning District, Shanghai, CHINA 200050 TEL: +86 021-5212-7942 URL: www.nidek-china.cn

NIDEK SINGAPORE PTE. LTD. 51 Changi Business Park Central 2, #06-14, The Signature 486066, SINGAPORE TEL: +65 6588 0389

URL: www.nidek.sg