

# Keratron™ *Nova*

DESIGNED AND  
MANUFACTURED  
IN ITALY

The most recent evolution of the family of Keratron topographers, **Keratron Nova** represents a standard of excellence in corneal topography. The only portable topographer, able to capture and process images, process maps on board and which has an internal patient database exportable via LAN or USB.

## Main functions:

- "Cone" corneal topography  
EPCS (Eye Positioning Control System)
- Corneal aberrometry
- Scotopic and photopic pupillometry
- Non-invasive break-up time

**Keratron Nova** is equipped with an easy and intuitive software and a touch screen colour display which allows quick access to the image processing system, ensuring highly repeatable and reliable results even in the most complex cases.

The simplicity of the capturing system and the "mires cone", with dual functionality Near/Far, offer the advantages of a superior corneal coverage and an easier/faster capturing, ensuring a better efficiency and a lower number of repeated attempts.

The accuracy of the data helps to optimise testing of contact lenses, helping the specialist in difficult and particular conditions.

5.7" TOUCH SCREEN

ENHANCED LIVE IMAGE

FAST BURST  
ACQUISITION MODE



ON-BOARD DATABASE  
AND MAP PROCESSING

BIVALENT CONE FOR WIDE  
CORNEAL COVERAGE  
AND FAST ACQUISITION

USB/LAN  
CONNECTIVITY

THE SHARPEST VISION.

**OPTIKON™**  
Man and Technology

# Technical specifications **Keratron™ Nova**

PARAMETER	SPECIFICATION
Model	Keratron™ Nova ref. 161601
<b>VIDEOKERATOSCOPE</b>	
Configuration	Mountable on the most popular slit lamps
Area of analysis	10mm x 14 mm
Keratoscope Cone	28 border mires equally spaced on a 43D sphere. Bivalent cone with Near/Far selection by touch screen
Analysed points	Over 80,000
Measured Points	7,168
Corneal coverage	From 0.33 mm (minimum diameter on a 43D sphere) up to 11mm on a normal eye
Measured Area	90% of the corneal surface (normal eyes) with "close" cone selection. 75% of the corneal surface (normal eyes) with "distant" cone selection
Dioptric power range	From 1 to over 120D
Resolution	±0,01D - 1 micron
Focusing device	Eye Positioning Control System EPCS (patented) automatic acquisition with decentration correction
Videocamera	Monochromatic - high sensitivity (CCD)
Monitor	5.7" TFT display with touchscreen
Other features	Processing on Videokeratoscope of rings, axial, curvatures, spherical offset and Gaussian maps, TBUT, sim-K, E-values, pupil data. Internal patients database
Accessories included	Calibration sphere, touch pen, USB memory stick, Software Scout, footswitch, power supply, Ethernet cross-over cable
Capturing images	Capturing by footswitch or button. Capturing in semi-automatic mode ("burst")
Communication external PC and VK	Via Ethernet cable (cross) provided for connecting "peer to peer" with the external PC (not supplied), or via a LAN network. Exams export to USB stick
Power supply	100-240VAC, 50/60Hz, with medical power supply provided

<b>COMPUTER (Recommended Minimal Requirements)</b>	
Operating System	MS Windows 7/8/10 (32 e 64 bit)
Processor/memory	Intel i3, 2GB RAM
Disks	Internal 180 GB HD, CD-ROM
Monitor	Super VGA color monitor 14", 1024x768 points 16 millions color
Printer	Color printer
Ports	Ethernet, USB 2.0 High speed

## SOFTWARE

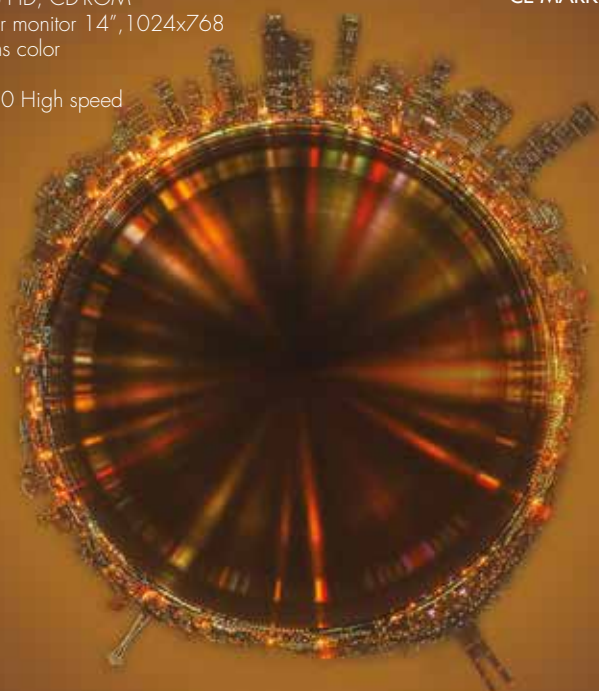
Dioptric scale	Absolute, Normalised, Adjustable
Keratometric values and indices	K-readings. Meridians, semi-meridians, Maloney indices, eccentricity, CLMI Keratoconus indices, keratoconus follow-up
Pupil	Definition of the edge, diameter and decentration (angle K)
Zone and grids	Indication of the diameters 3, 5 and 7 mm, Cartesian axes, and millimeter grid
Maps	Local curvature, axial curvature, wavefront OPD or wavefront error (WFE) refraction and height map with 3D insert
Axis moving	Position of the axis selectable as corneal vertex, pupil center on any other choice
Print	Print screen with header of the institution or personalized print templates
Special functions	Profiles, difference, repeatability check, maps comparison caliper, refraction calculator
Image acquisition and videos	Enabled with TV camera mounted on slit lamp and any video capture board (not included)
On-line help	Detailed on line multi language help detailed for all functions
Contact Lens	Fluorescein pattern simulation of most international contact lens manufacturer geometries. Tilting to simulate lid pressure. Lens displacement in any position. Eccentricity measure at 6 and 8 mm, over refraction calculator. Personalised auto-fit for customised lens. Ortho-K custom fitting. Adjustable clearance scale. Link to third party software.
Internet connection	Maps can be sent as attachments to e-mail messages
Local network and database	Management of one or more independent databases shareable in a network

## OPTIONALS

Analysing contact lenses kit  
Base with joystick and left/right sensor  
Standard mires cone

## CONFORMITY

CE MARK Directive 93/42/CEE



L x W x H:  
270 x 155 x 285 mm

**OPTIKON™**  
Man and Technology

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