REF 161104

The Standard in Corneal Topography

The first topography unit to accurately represent the local curvature calculated by an "Arc-Step" method.

Because of its outstanding precision, test repeatability and capability to highlight even the smallest details, the Keratron[®] represents a standard of reference in corneal topography.

The 28-ring Placido cone allows coverage up to the 80-90% of the corneal surface. The peripheral measurements are extremely important for the analysis of the transition areas in refractive surgery, for the correct simulation of contact lens fitting and for the diagnosis of peripheral alterations.

The "Arc-Step" calculation method, as well as many other proprietary algorithms in the software, allows the measurement of both curvature and height at each point on the cornea with a resolution of one micron or less.

The patented Eye Position Control System (EPCS) allows image acquisition only at the correct focusing distance; and lateral misalignments are automatically corrected. The large, high-resolution monitor clearly displays the tear film and the still images during examinations, in order to avoid artifacts. It also allows the review of images previously acquired.





The "Keratron[®] Bridge" supplies power to the Keratron[®] videokeratoscope and performs the frame capturing of acquired images, making it fully independent from the PC. The USB port interface allows its connection with any modern PC, either desktop or laptop. All Optikon topographers use the same software, which is compatible with most recent Windows operating systems.

KERATRON[®]

TECHNICAL FEATURES Keratron®

VIDEOKERATOSCOPE

- AREA OF ANALYSIS
 10mm x 14mm (visible on the monitor)
- KERATOSCOPE CONE 28 border mires, equally spaced on a 43D sphere
- ANALYZED POINTS

over 80.000

MEASURED POINTS

7168

CORNEAL COVERAGE

From 0.33mm (minimum diameter on a 43D sphere) up to 11mm on a normal eye

MEASURED AREA

90% of the corneal surface (normal eyes)

DIOPTRIC POWER RANGE
 From 1D to over 120D

- RESOLUTION

+/- 0.01D - 1 micron

FOCUSING DEVICE

Eye Positioning Control System EPCS (patented) automatic acquisition, with decentration correction

TV CAMERA

High resolution (C.C.I.R.)

- **MONITOR** 6" B&W
- OTHER FEATURES

Automatic OD/OS detection, Placido ring image available on the B&W screen

• WEIGHT

11 Kg

ACCESSORIES INCLUDED

Table top with head rest, calibration kit, footswitch, Scout software

KERATRON® BRIDGE UNIT

- POWER SUPPLY
 Mains (100-110 or 220-240 Vac, 50/60Hz) to
 Videokeratoscope (+5, +12, -12Vdc)
- IMAGE ACQUISITION
 Acquisition through footswitch and EPCS, digital conversion and storage (freeze) on B&W monitor
- PC-VK LINK
 Through USB port
- SOFTWARE
 Scout release 3.2 or higher

COMPUTER (Recommended Minimal

Requirements)

- ENVIRONMENT
 MS Windows 2000/XP/Vista/7
- PROCESSOR/MEMORY
 Pentium III 450MHz, minimum 64 Mb RAM
- DISKS
 Internal 10 Gb HD, internal 8x CD-Rom, drive 3 1/2"
 minimum 1.44Mb
- MONITOR
- Super VGA color monitor 14", 1024x768 points, 16 million colors
- PRINTER

Color printer

- PORT
- USB Port

SOFTWARE

- DIOPTRIC SCALE
- Absolute, Normalized, Adjustable
- KERATOMETRIC VALUES AND INDICES
 Sim K-readings, Meridians, Hemimeridians, Maloney

Indices, Eccentricity, CLMI Keratoconus indices

PUPIL

Photopic and Scotopic

Border detection, diameter and decentration

- ZONES AND GRIDS
 3,5 and 7 mm, orthogonal axis or millimeter grid
- MAPS
 Local curvature, axial curvature, wavefront OPD
- or Wfe refraction map with 3D insert • MOVE AXIS

Position of the axis selectable as corneal vertex, pupil center or 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 MOVIES

Enabled with TV camera mounted on a slit lamp and 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 of international contact lens manufacturers' geometries Tilting to simulate lid pressure Lens displacement in any position. Eccentricity measured at 6 and 8 mm, over-refraction calculator. Personalized auto-fit for customized lens 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

OPTIONS

• FAR MIRES CONE

For deep set eyes. 28 mires are 3mm more recessed than standard cone. Coverage 75-80% of cornea

KERATRON[®] BRIDGE

Upgrades Keratron[®] using internal FGB, in order to use USB connection and updated Scout software

REGULATORY

CE MARK
 Directive 93/42/CEE

KERATRON[®]