RT-7000 SPECIFICATIONS

Measurement Ranges

Refraction Measurement
- Sphere: -23.00D to +22.00D (VD: 12.0mm)
- Cylinder: 60D to 210D (VD: 12.0mm)
- Axis: 0 to 180°

Corneal Curvature Measurement
- Range: 5.00mm to 11.00mm
- Measurement Zone: 3mm, 8.00mm

Corneal Mapping Display Range
- 9 to 100 D
  - Normal Mode: φ 1.0 to 1.8 (mm) R: 2.0 (mm)
  - Special Mode: φ 0.5 to 0.7 (mm) R: 2.0 (mm)

Measurement Time
- KSF: 0.2 seconds
- KRT: 0.1 seconds

Minimum Pupil Diameter
- φ 2.2mm

Minimum Measurement Step

Refraction Measurement
- Sphere: 0.01D
- Cylinder: 0.01D
- Axis: 1°

Corneal Curvature Measurement
- Range: 0.01 mm

PDI (Pupil Distance)
- Range: 50mm to 84mm

Recording
- Built-in Thermal Printer

Vertex Distance
- 6mm, 12mm, 13.5mm, 14.0mm, 15.3mm, 16.0mm

Exterior Output
- LAN port / 4/8 port

Dimensions
- High: 502mm or 20 inches
- Width: 307mm or 12 inches
- Depth: 490mm or 19 inches

Weight
- Approx. 20.0kg / 44.1lbs

Display
- 6.4 inch color liquid crystal display

Power Supply
- Voltage: AC 100 to 240V
- Frequency: 50/60Hz
- Consumption Power: 120W / 150VA
- Temperature: -10°C to +40°C
- Display: 30% to 75%

Three Functions in One Instrument
- Easy & Speedy Touch Screen Alignment
- 6.4 inch color TFT LCD
- Auto Alignment / Auto Shot
- Dual CCD technology for Refractometry
- IOL / Cataract Mode
- New Indices for Keratometry: KAI, KRI
- TSAS (Tear Stability Analysis System)
- MODE for Dry Eye

For more information, visit our web site: http://www.tomey.com

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Three Functions in One Instrument

Refractometer, Keratometer and Topographer only in 1 unit. Senior citizens and children can also get the inspection without any trouble because they don’t have to move the seat for three measurements.

Switch from Ref-Kerato Mode to Corneal topography Mode with only ONE TOUCH. The light cone appears with only one button from the measuring head and the Ref-KeratoMeter is transformed to the Topographer.

Auto Alignment / Auto Shot

Anyone can easily capture measurements with Auto Alignment and Auto Shot.

The measurement variation is significantly reduced no matter what the skill level is of the operator.

Keratometry

New Indices for Keratometry: KAI, KRI

The Corneal Irregular Astigmatism display function is installed to expand the possibility of Keratometry. This is the new function to measure the level of Corneal Irregular Astigmatism, which was difficult in the past.

The indices of KAI and KRI that show the Corneal Irregular Astigmatism are displayed with its three levels(A-B-C) at Keratometry.

KAI: (Kerato-Asymmetry Index)

The index indicating the asymmetry of cornea. This index becomes larger when the corneal shape is asymmetric.

KRI: (Kerato-Regularity Index)

The index indicating the regularity of the cornea (higher-order irregular astigmatism). This index becomes larger when the corneal surface is not smooth.

Diameter Measurement of Cornea and Pupil

The measurement can be done easily by moving the two cursors on the display to the boundary of Cornea or Pupil. This is useful for deciding the diameter of a contact lens.

Corneal Topography

TSAS (Tear Stability Analysis System) MODE for Dry eye

TSAS is the system for analyzing the tear stability using the light cone system. The mire ring is projected onto the cornea of the patient’s eye for 6 seconds and the image of the mire ring is captured at a specific interval. The system interprets the tear layer that changes as time passes as distortion of the mire ring image, analyzes the mire ring, and shows the position and time where the tear layer changes in the color code map.

Various Color Maps

Absolute and Normalized color maps can be viewed.

CL Fitting Simulation

A pseudo-fluorescein pattern of the contact lens selected from the built-in data base can be confirmed, and the fitting can be simulated before the patient wears the Trial-Lens.

Corneal Eccentricity Index for “Ortho-K Lens”(CEI)

The index of CEI (Corneal Eccentricity index) indicates the ratio of flattening in percentage from the central cornea to the periphery.