

2023/2024

product
catalogue



Your specialist
*for easy-to-use
high-tech solutions.*



OUR PROMISE

Our comprehensive range of precision diagnostic instruments reflects our commitment to maximum quality, service and innovation. This leads to early prevention, accurate diagnoses and examinations that are as comfortable as possible. All for the patient's benefit.

Our highly motivated team of experts works continuously to develop solutions for ophthalmic diagnostics that will remain viable into the future. With the courage to innovate and curiosity about what the future has to offer, we share a common goal: to make the day-to-day work of ophthalmologists and opticians as easy and as successful as possible.

Product range

Diagnostics

OCT	p. 6
Optical Biometer	p. 8
Ultrasound	p. 10
Tonometer	p. 14
Topographer	p. 18
Fundus Camera	p. 20
Specular Microscope	p. 22
Perimeter	p. 24
Electrophysiology	p. 28

Refraction

Multifunction Unit	p. 32
Auto Ref-Keratometer	p. 34
Phoropter	p. 40
Chart System	p. 46
Lensmeter	p. 52
Slit Lamp	p. 56
Refraction Accessories	p. 62

Furniture

Refraction Unit	p. 66
Electric Lift Table	p. 74





Diagnostics

TOMEY diagnostic equipment enables independent and targeted operation. This ensures the reliable examination of each client.



“THE INNOVATIVE TECHNOLOGY OF OUR TRULY FASCINATING DIAGNOSTIC PRODUCTS ACHIEVES EXCELLENT RESULTS AT ANY TIME.”

Kathrin Benedikt

AREA SALES MANAGER,
WESTERN EUROPE / EUROPE

OCT

CASIA2 p. 6

Optical Biometer

OA-2000 p. 8

Ultrasound

AL-4000 p. 10

UD-800 p. 12

Tonometer

TOP-1000 p. 14

FT-1000 p. 16

Topographer

TMS-4N p. 18

Fundus Camera

TFC-1000 p. 20

Specular Microscope

EM-4000 p. 22

Perimeter

AP-2500 p. 24

AP-4000 p. 26

Electrophysiology

EP-1000 Pro/ p. 28
Multifocal

CASIA2

Cornea/Anterior Segment OCT

The CASIA2 provides an impressive user experience with intuitive operation and automation, supported by an unbelievable measurement speed (a topographic image is captured in just 0.3 seconds). Our software guides you through measurement, analysis and the final report. Get inspired now and see the eye from a different perspective.

Excellent features

- + Testing application for cataract/ glaucoma/cornea surgery
- + Glaucoma angle analysis (360°)
- + Advanced imaging with deep scanning depth (13 mm)
- + Very fast scanning speed (50,000 A-scans/second)
- + Corneal topography, IOL choice, and calculation
- + Lens shape analysis and trend analysis
- + Phakic IOL simulation
- + ICL Pre- and Post-OP application
- + Colour fixation camera
- + High intense illumination



Specifications

MEASUREMENT RESOLUTION	
Axial (Depth)	10 µm or less (in tissue)
Transverse	30 µm or less (in air)
MEASUREMENT SCAN RANGE	
Depth	13 mm
Transverse	Radial scan: Ø 16 mm Raster scan: 12 x 12 mm
MAIN UNIT	
Scan rate	50,000 A-scans/second
Stroke range of moving section	40 mm (y-axis); 88 mm (x-axis); 43 mm (z-axis)
Stroke range of chin rest	70 mm
Type of light source	Swept laser source
Laser source wavelength	1,310 nm
WORKSTATION COMPUTER	
External HDD	8 TB or more
OS	Windows®10 64bit
CPU	Intel® Core i5
Memory	8 GB or more
SSD	128 GB
HDD	8TB or more
Data output	Printer (LAN, USB)
Display	Touch panel LCD monitor 20" or larger
DIMENSIONS AND ELECTRICAL REQUIREMENTS	
Dimensions WDH	530 x 560 x 455 mm
Weight	approx. 33 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	170 VA
Power output	Less than 6 MW
Laser class	Class 1
OPTIONAL FUNCTIONS	
STAR Analysis	Glaucoma application
DICOM	Communication and archiving

OA-2000

Optical Biometer

The OA-2000 is the perfect instrument for measuring axial length, the corneal curvature radius, corneal topography and more in a single measurement. High penetration capability is available using the Fourier domain method, which enables high-speed scans.

Excellent features

- + Axial length
- + ACD and lens thickness
- + Topography-Keratometer
- + All measurements – just one touch
- + Pachymetry
- + White to White
- + Pupil diameter
- + IOL ray-tracing calculation by OKULIX (optional)



Specifications

MEASUREMENT RANGE

Axial length	14 – 40 mm
Anterior chamber depth	1.5 – 7.0 mm
Crystalline lens thickness	0.5 – 6.0 mm
Corneal thickness	0.2 – 1.2 mm
Corneal curvature radius	5.0 – 11 mm
Pupil diameter	1.5 – 13 mm
Corneal diameter	7 – 16 mm

MEASUREMENT ACCURACY

Axial length	±0.03 mm
Anterior chamber depth	±0.05 mm
Crystalline lens thickness	±0.05 mm
Corneal thickness	±5 µm
Corneal curvature radius	±0.02 mm (∅ 3 mm/∅ 2.5 mm)
Pupil diameter	±0.1 mm
Corneal diameter	±0.3 mm

AUXILIARY INFORMATION / DISPLAY RESOLUTION

Axial length	0.01 mm
Anterior chamber depth	0.01 mm
Crystalline lens thickness	0.01 mm
Corneal thickness	1 µm
Corneal curvature radius	0.01 mm

IOL POWER CALCULATION FORMULA

Haigis standard, Haigis optimised, Hoffer® Q, Holladay 1, Olsen, SRK/T, Shammas-PL, SRK/T Double K

Optional: OKULIX, Barrett Universal II, Barrett Toric Calculator, Barrett True K Toric Calculator, Barrett True K formula

DATA MANAGEMENT

Built-in printer	Thermal printer
Data output type	USB-H×2, USB-D×1, LAN, SD card
Display	10.4" colour TFT monitor

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	300 × 490 × 450 mm
Weight	approx. 24 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	110 VA
Laser class	Class 1 under IEC60825-1

AL-4000

Bio- & Pachymeter

This extremely handy and easy-to-use combination of biometer and pachymeter leaves nothing to be desired in terms of comfort and flexibility. Wireless communication plus the fully integrated IOL power calculation software allow users to access the complete set-up of the handheld device AL-4000 on a PC.



Excellent features

- + Axial length and corneal thickness
- + Multiple IOL power calculation
- + A-scan diagnostic probe (optional)
- + Compact body
- + Integrated database software (TB-1000)
- + Contact and immersion mode
- + Bluetooth

Specifications

AXIAL LENGTH MEASUREMENT (BIOMETRY)	
Axial length	13.00 to 45.00 mm
ACD	1.50 to 7.00 mm
Lens thickness	2.00 to 6.00 mm

BIOMETER ACCURACY	
Measurement accuracy	±0.1 mm
Measurement resolution	0.01 mm

AUXILIARY INFORMATION	
IOL power calculation	SRKII, SRK/T, HOLLADAY, Hoffer® Q, HAIGIS Standard

BIOMETRY PROBE	
Type	Solid state
Fixation light	Built in the probe, Red LED
Transducer frequency	10 MHz
Tip diameter	6.0 mm φ
Dimensions/Weight	14.0 mm φ × 98 mm / 40 g

CORNEAL THICKNESS MEASUREMENT (PACHYMETRY)	
Measurement range	150 to 1,500 μm
Measurement accuracy	±5 μm
Measurement resolution	1 μm

PERCENT BIAS/PLUS/MINUS BIAS SETTING RANGE	
Percent bias	60 to 130%
Plus/minus bias	-600 to +450 μm
Factory setting converted velocity	1,640 m/s
Range of the converted velocity	1,400 to 2,000 m/s

PACHYMETRY PROBE	
Type	Solid state
Transducer frequency	20 MHz
Tip diameter	1.5 mm φ with an angle of 45°
Dimensions/Weight	8.8 mm φ × 90 mm / 30 g

A-SCAN DIAGNOSTIC	
Measurement range	60 mm

A-SCAN DIAGNOSTIC PROBE	
Type	Solid state
Transducer frequency	10 MHz
Tip diameter	5 mm φ
Dimensions/Weight	8 mm φ × 97 mm / 30 g

DIMENSIONS AND ELECTRICAL REQUIREMENTS	
Dimensions WDH	109 × 52 × 166 mm
Weight	470 g
Display	TFT LCD: 3.5" colour

UD-800

Ultrasonic A/B Scanner and Pachymeter

The B-scanner, Biometer, Pachymeter and A-diagnostic – all in one. The UD-800 was developed to satisfy all your expectations and requirements. Features such as the new generation of annular array probe, high-resolution touch-screen operation, and data communication via USB or LAN makes this device easy to handle and fast and efficient in operation. Simply choose all your desired features! With its unique 10 MHz 2-ring array B-scan probe and A-scan biometry probe, the UD-800 is a fantastic choice as your basic tool.



Excellent features

- + Modular configurable system
- + External database (USB flash drive)
- + Unique 2-ring array 10 MHz B-probe
- + Biometer A-scan 10 MHz (optional)
- + Pachymetry (optional)
- + UBM 40 MHz B-probe (optional)
- + A-diagnostic probe (optional)

Specifications

10 MHZ B-MODE (IMAGE DISPLAY)	
Frame rate	Basic mode: 20 frame/sec
Image display range	Standard: 35.2 mm/52° (at ultrasound velocity = 1550 m/sec) Wide: 48.0 mm/52° (at ultrasound velocity = 1550 m/sec)
Display resolution	Lateral accuracy: 0.6 mm Axial accuracy: 0.6 mm
10 MHZ B-PROBE	
Transducer type	2-ring
Scan type	Sector scanning
Acoustic lines	131 lines (step by 0.4°)
AXIAL LENGTH MEASUREMENT (BIOMETRY)	
Axial length	15.00-45.00 mm
ACD	1.80-7.00 mm
Lens thickness	2.00-6.00 mm
Measurement accuracy	±0.1 mm
Measurement resolution	0.01 mm
IOL POWER CALCULATION	
IOL power calculation	Haigis standard, Haigis optimised, Hoffer® Q, Holladay 1, SRK II, SRK/T, SRK SHOWA, Shammas-PL, SRK/T Double K
BIOMETRY PROBE	
Type	Solid state
Fixation light	Built in the probe, Red LED
Transducer frequency	10 MHz
Tip diameter	5.3 mm φ
Dimensions/Weight	8 mm φ × 100 mm/30 g
CORNEAL THICKNESS MEASUREMENT (PACHYMETRY)	
Measurement range	150 to 1,500 μm
Measurement accuracy	±5 μm
Measurement resolution	1 μm
PACHYMETRY PROBE	
Type	Solid state
Transducer frequency	20 MHz
Tip diameter	1.5 mm with an angle of 45°
Dimensions/Weight	8.8 mm φ × 90 mm/40 g
A-SCAN DIAGNOSTIC	
Measurement range	60 mm
A-SCAN DIAGNOSTIC PROBE	
Type	Solid state
Transducer frequency	10 MHz
Tip diameter	6.0 mm φ
Dimensions/Weight	8 mm φ × 100 mm/30 g
DIMENSIONS AND ELECTRICAL REQUIREMENTS	
Dimensions WDH	310 x 214 x 326 mm
Weight	6 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	120 VA
Display	TFT LCD 10.4" colour touch screen

TOP-1000

Non-Contact Tonometer with Pachymetry

By combining soft air puffing, 3D auto-tracking and a Scheimpflug camera, TOP-1000 delivers excellent IOP measurements that are corrected for central corneal thickness.

Excellent features

- + 3D auto-tracking
- + Auto-measurement
- + Soft air puffing
- + Pachymetry for IOP correction
- + Excellent measurement replicability
- + Friendly user interface on 10.1" touch screen
- + Patient database



Specifications

INTRAOCULAR PRESSURE MEASUREMENTS

Measurement range	1-60 mm Hg
Measurement range setting	Auto/30 mm Hg/60 mm Hg
Measurement principle	Air puff method
Display units	mm Hg/hPa
Working distance	11 mm

CENTRAL CORNEAL THICKNESS MEASUREMENT

Measurement range	400-800 μ m
Measurement principle	Slit image on central cornea
Light source	Blue LED

MAIN UNIT

Measurement mode	Fully automatic/Automatic/Manual
Alignment	Fully automatic 3D tracking
Chin rest	Motorised
Display	10.1" LCD touch screen
Printer	Thermal line printer with auto-cutter
Fixation target	Internal LED fixation light
Operation movement range	Front/Back: 40 mm Left/Right: 90 mm Up/Down: 30 mm
Chin rest movement range	Up/Down: 70 mm
Interface	USB, RS-232, LAN

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	282 x 500 x 500 mm
Weight	17 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz

FT-1000

Non-Contact Tonometer

The FT-1000 is a solid and proven non-contact tonometer. Its soft air puffing and full automation make it comfortable for both patients and operators.



Excellent features

- + Touch screen alignment system
- + Auto-alignment and auto-measurement
- + Cornea thickness-related IOP correction
- + Soft and quiet air puffing
- + Fast measurement

Specifications

MEASURING INTRAOCULAR PRESSURE

Measurement range	0-60 mm Hg, (0-30 mm Hg/25-60 mm Hg)
Measurement	1 mm Hg (1 hPa) increments within the measurement range

MAIN UNIT

Built-in printer	Thermal printer
Data output type	RS-232C
Display	5.7" colour LCD

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	306 x 493 x 463 mm
Weight	approx. 18 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	85 VA to 110 VA

TMS-4N

Topographic Modeling System

The TMS-4N offers high resolution, accuracy and easy operation. The placido light cone design eliminates nose and brow shadows and provides extensive corneal coverage.



Excellent features

- + Easy-to-use and compatible software (Windows 7, 8.1, 10)
- + Over 6,000 measurement points
- + Accurate and reproducible measurement
- + Multilingual operation
- + Fourier refractive analysis
- + Keratoconus screening software
- + Large patient database

Specifications

MEASUREMENT	
Measurement type	Ring cone
Ring numbers	25
Measurement points	6,400 maximum
Measurement points on a ring	256
Min. / Max. ring diameter	φ 0.46 to 8.8 mm on 43 D model eye
Corneal curvature radius measurement range	5.5 to 10.0 mm
Corneal curvature radius measurement accuracy	±0.02 mm

CL OPTION ONLY	
Ring numbers	31
Measurement points	7,300 maximum
Measurement points on a ring	256
Min. / Max. ring diameter	φ 0.57 to 10.9 mm on 43 D model eye

PERSONAL COMPUTER (REQUIREMENT)	
OS	Windows® 7 Professional (32bit,64bit) Windows® 8.1 Professional (64bit) Windows® 10 Professional (64bit)
CPU	Intel® Core™2 Duo processor or higher
Memory	512 MB or higher
Interface	USB 2.0 (Connection with a main unit)
Display (Resolution)	800 x 600 or higher

REQUIRED SPECIFICATION OF THE ISOLATION	
Transformer	Output more than 500 VA

DIMENSIONS AND ELECTRICAL REQUIREMENTS	
Dimensions WDH	296 x 508 x 448 mm
Weight	14 kg
Voltage	AC 100 to 240 V
Frequency	50/60 Hz
Power consumption	45 VA to 55 VA
Display	5.7" colour LCD

TFC-1000

Fundus Camera

The TFC-1000 fully automatically generates a fundus image within 15 seconds using eye tracking, auto-focus and auto-measurement. The “KISS principle” (keep it short and simple) had the highest priority in the design of the software and workflow. This makes the operation of the TFC-1000 extremely easy. The user-friendly interface is very intuitive and delivers results in a very short time.



Excellent features

- + Automatic eye tracking
- + Auto-focus and auto-measurement
- + Fundus image within 15 seconds
- + Multi-imaging display
- + Field of view 45° × 45°
- + 12M pixel sensor
- + 10 fixation points
- + Anterior segment imaging
- + Ready for 3rd party screening software

Specifications

FEATURES AND FUNCTIONS

Type	Digital non-mydratric retina camera
Type of photography	Colour, digital red-free, anterior eye image
Light source	Observation light source: Infrared LED Flash light source: White LED
Auto-exposure	YES
Auto-focusing	YES
Image	12 MP
Image resolution	4096 x 3072
Alignment	Fully automatic 3D tracking
Chin rest	Motorised

MEASUREMENT

Field of view	45° x 45° up to 80°
Minimum pupil size	4 mm
Working distance	25 mm
Focus adjustment range	-15 D to +10 D (without compensation lens) -30 D to +30 D (with compensation lens)
Flash intensity	10 levels, can be set manually
Fixation target	10 internal points

NETWORK CAPABILITY

Interface	USB 2.0, Ethernet, HDMI, WiFi
Image format	JPEG, PNG, Dicom, BMP

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	282 x 485 x 492 mm
Weight	17 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	<150 W

EM-4000

Specular Microscope

Non-contact examination, auto alignment and measurement, plus automatic analysis of the endothelium layer make working with the EM-4000 fast and precise.

Excellent features

- + Auto alignment and auto measurement
- + Integrated non-contact pachymetry
- + 13 measurement areas
- + Integrated database and printer
- + L-count, trace, core method, and dark area analysis
- + Very fast



Specifications

MEASUREMENT	
Measurement method	Non-contact
Capturing scope (WxH)	0.25 mm x 0.54 mm
Measurement range central corneal thickness	300-1000 μ m
Measurement accuracy central corneal thickness	$\pm 10 \mu$ m
Number of fixation points	1 central + 12 peripheral
Number of images per examination	16
MAIN UNIT	
Display size	10.4" colour LCD
ANALYSIS	
Analysis method	Automatic analysis, L-count, core method, dark area analysis
Output	Number (the number of analysed cells) CD (cell density) AVG (average cell area) SD (standard deviation of cell area) Max (maximum cell area) Min (minimum cell area)
Histogram	Area (Polymegathism: Distribution by areas), Apex (Plemorphism: Distribution by polygonal shapes types)
DATA MANAGEMENT	
Built-in printer	Thermal printer
Internal database	SD card
Data output	USB-H, USB-D, LAN
DIMENSIONS AND ELECTRICAL REQUIREMENTS	
Dimensions WDH	309 x 491 x 450 mm
Weight	approx. 22 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	100 VA

AP-2500

Automated Perimeter

The AP-2500 is a static back LED-projection automated perimeter with full-field measurement. It provides a wide range of test strategies, test fields and parameters.



Excellent features

- + Digital eye-tracking
- + LED technology
- + Pupil measurement
- + Multilingual user interface
- + Customised test programmes
- + EU driver's licence test conformity

Specifications

TEST SPECIFICATIONS	
Maximum temporal range	80° (with fixation shift)
Maximum superior/inferior range	50°
Stimulus duration	0.1-9.9 sec
Visual field testing distance	30 cm
Background illumination	10 asb (3.2 cd/m2)
Stimulus Intensity	1,000 asb
TEST MODES	
Supra threshold age corrected (Screening)	x
Single intensity	x
Full threshold	x
Fast threshold	x
Smart threshold	x
2-Zone, 3-Zone, Quantify Defect, Neurological	x
SPECIALTY TEST LIBRARY	
Bi-Driving, Industrial Medicine, monocular, binocular	x
Peripheral	x
Custom testing	x
TEST FIELD LIBRARY	
Glaucoma (nasal step)	x
Central 22, Central 30, Macula 10, Full	x
Peripheral	x
COMPUTER	
Touch screen support	x
FIXATION CONTROL	
Heijl Krakau blind spot monitor	x
Eye tracking (video camera)	x
Eye preview (video camera)	x
STIMULUS	
Green on White	x
GENERAL TESTING FEATURES	
Stimulus size (Goldmann size)	III
Fovea threshold testing	x
Automatic pupil measurement	x
ADDITIONAL SOFTWARE FEATURES	
Network connectivity	x
DICOM export	x
Fast threshold strategies	x
Time adaptive algorithms	x
Regression analysis	x
Printer	External or network printer
DIMENSIONS AND ELECTRICAL REQUIREMENTS	
Dimensions WDH	566 x 420 x 637 mm
Weight	18 kg
Voltage	110 VAC to 230 VAC
Frequency	50/60 Hz
Power consumption	Max. 45 VA

AP-4000

Automated Perimeter

The AP-4000 is a versatile and fully equipped kinetic and static perimeter. It's optimised to provide excellent patient comfort, extensive testing options, and a user interface that navigates the operator through the test options effortlessly.

Excellent features

- + Complete set of threshold, supra-threshold, and kinetic tests
- + Goldmann I to V stimulus size
- + Advanced eye-tracking
- + Comprehensive test reports and progression analysis
- + 17" HD capacitive touch screen
- + Patient audio guide



Specifications

TEST SPECIFICATIONS	
Maximum temporal range	90°
Stimulus duration	200 ms/500 ms or 0.1 - 9.9 s
Visual field testing distance	30 cm
Background illumination	31.5 ASB White/10 ASB White/315 ASB Yellow
STIMULUS	
Stimulus size	Goldmann I, II, III, IV, V
Stimulus colour	White/Green/Red/Blue
Stimulus colour presentations	White-on-white Red-on-white, green-on-white, blue-on-white Blue-on-yellow (SWAP)
TEST STRATEGIES	
Threshold	TIA-Standard, TIA-Fast, TIA-Superfast, TIA-SWAP, Full Threshold, Fast Threshold, Foveal Threshold
Suprathreshold	Two Zone, Three Zone, Quantify Defects
TEST FIELDS	
Threshold	Central 24-2, Central 24-2C, Central 10-2, Central 30-2, Peripheral 60-4, Macula, Nasal Step
Suprathreshold	Central 40 Point, Central 64 Point, Central 76 Point, Central 80 Point, Armaly Central, Nasal Step, Peripheral 60 Point, Full Field 81 Point, Full Field 120 Point, Full Field 135 Point, Full Field 246 Point, Armaly Full Field, Superior 36 Point, Superior 64 Point, Esterman Monocular, Esterman Binocular, Gandolfo
Test modes	Age Corrected, Threshold Related, Single Intensity
AUXILIARY FUNCTIONS	
Fixation control	Heijl-Krakau blind-spot monitor, Video-camera eye preview, Digital Eye Tracking (DETECT), Head Tracking, Vertex monitoring
Software features	Foveal threshold testing, Automatic pupil measurement, Single Field Analysis (SFA), Glaucoma Hemifield Test (GHT), Field of View Index (FVI), Serial field overview, DICOM Export, DICOM OPV (Ophthalmic Visual Field), DICOM Worklist Modality, Manual kinetic, Auto kinetic, EyeSnap function, Near Vision Test, Custom static test patterns, Custom kinetic test patterns, Remote Diagnostics and Software Loading, User-defined results storage location, Progression Analysis
DEVICE FEATURES	
Display	Touch-screen LCD 17" diagonal
Keyboard/mouse support	Yes
Network	LAN and wireless
Chinrest	Automated - up, down, left, right movement
Speakers and microphone	Built-in
DIMENSIONS	
Dimensions WDH	566 x 396 x 633 mm
Weight	24 kg

EP-1000 Pro/Multifocal Electrophysiology

The EP-1000 is an ophthalmologic diagnostic unit for a complete examination of the retina's function, the visual pathway and the optic nerve. A variety of diagnostic procedures can be performed, including ERG, VEP, MERG, MVEP and EOG.

This unit can only be operated by physicians and medically trained technical assistants. EP-1000 complies with the ISCEV's standards (International Society for Clinical Electrophysiology of Vision).



Excellent features

- + LED colour flash and background illumination
- + S-cone analysis, PERG Ratio
- + Multifocal ERG
- + Programme editor for individual examinations
- + ISCEV-conforming standard tests

Specifications

SAFETY SPECIFICATIONS	
Protection class	Type BF
Risk class	Class IIa according MDD 93/42/EWG
Electrical safety	Class I (ground wire)
Biosignal amplifier	2 channels (optional up to 6 channels)
LED wavelength	Blue 450 nm; green 530 nm; red 625 nm
Flash intensity	0.1 to 30 cds/m ²
Light intensity	0 to 600 cd/m ²
Filter	2.5 log (electrical)
Calibration	Yes

BACKGROUND LIGHT	
Lamp type LED	Green, red, blue, white
Light intensity continuous	0-600 cd/m ²
Calibration	Yes
IR backlight for camera	Yes/switchable
EP-1000 PRO examinations	ERG / ERG S-cone / ERG ML-cone / ERG 30Hz / PERG / PERG ratio / VEP / Flash VEP / VEP Children / VEP uncooperative / Sweep VEP / EOG
EP-1000 Multifocal examinations	mfERG (FOK / SOK) mfPERG / mfVEP
Used stimulation (multifocal)	M-sequences (127 to 8191)
Analysis display (multifocal)	Curves/values/2D/3D quadrants rings up to 8 programmable groups and tables
Values/hexagon	P50 (nV/deg; ms) / N95(nV; nV/deg; ms) / scalar product (µV/deg) / comp area (deg)

DIMENSIONS AND ELECTRICAL REQUIREMENTS	
Dimensions WDH	390 x 540 x 500 mm
Weight	approx. 12 kg
Voltage	100 VAC to 230 VAC ±10%
Frequency	50/60 Hz



Refraction

Our intention is to offer a wide range of equipment needed to determine the optimal visual acuity. From lensmeters to autorefractors and phoropters – and for manual or digital examination.



“WITH THE COMBINATION OF PRECISION INSTRUMENTS AND SIMPLICITY OF USE, OUR GOAL IS TO SHAPE THE FUTURE OF VISION.”

Cesar Cardoso

AREA SALES MANAGER,
MIDDLE EAST / AFRICA

Multifunction Unit

MR-6000 p. 32

Auto Ref-Keratometer

RC-800 p. 34

RC-900 p. 36

RC-5000 p. 38

Phoropter

TMP-800 p. 40

TMP-2000 p. 42

TAP-2000 p. 44

Chart System

Chart Projector:

TCP-4042 p. 46

Chart Panels:

TCP-2000A p. 48

TCP-4000

Polarising Chart Panels:

TCP-2000P p. 50

TCP-3000P

TCP-3000PX

TCP-4000P

Lensmeter

TL-6000/TL-7000 p. 52

TL-6100/TL-7100 p. 54

Slit Lamp

TSL-900H/ p. 56

TSL-900Hdigital

TSL-900Z

TSL-4000H/ p. 58

TSL-4000Z

TSL-7000H/ p. 60

TSL-7000Hdigital

TSL-7000Z/

TSL-7000Zdigital

Refraction Accessories

Trial Frame 10 p. 62

Trial Lens Set 266

Perimeter Lens Set 68

MR-6000

Multifunction Unit

The MR-6000 delivers a smart combination of five different eye examinations and a Dry Eye observation app. Along with the advantage of automatic alignment, this means that the MR-6000 speeds up your workflow and makes it more efficient.

Excellent features

- + 5 + 1: Ref, Kerato, Tono, Pachy, Topo, Dry Eye observation app
- + Quick refraction mode
- + Corrected IOP
- + Measurement cone interchange in just 4 seconds
- + Auto alignment and auto measurement
- + Pupil and cornea \varnothing measurement



Specifications

REFRACTIVE POWER MEASUREMENT

Spherical power	-30.00 D to +25.00 D (at VD = 12.00 mm)
Cylindrical power	0.00 D to ± 12.50 D (at VD = 12.00 mm)
Astigmatic axis	0° to 180°
Minimum pupil diameter	2.0 mm

KERATOMETRY MEASUREMENT

Corneal curvature radius	5.00 mm to 13.00 mm
Corneal astigmatic axis	0° to 180°

INTRAOCULAR PRESSURE MEASUREMENT

Measurement range	1 mm Hg to 60 mm Hg (1 hPa to 80 hPa)
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PACHYMETRY MEASUREMENT

Measurement range	300 μ m to 800 μ m
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TOPOGRAPHY MEASUREMENT

Corneal curvature radius	5.50 mm to 10.00 mm
Corneal astigmatic axis	0° to 180°

AUXILIARY FUNCTION

Interpupillary distance	20 mm to 85 mm
Corneal diameter and pupil diameter	1.00 mm to 14.00 mm
Dry-eye application	Blinking frequency, tear meniscus height, hyperemia, Meibomian glands

DATA MANAGEMENT

Internal database	Integrated SD card
Printer	Integrated thermal printer
Data output type	3x USB 2.0, 1x Ethernet, 1x SD card slot, 1x WLAN (not available in all countries)
Export format	DCM, XML, CSV, JPG, PDF

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	312 x 491 x 450 mm
Weight	approx. 23 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	110 VA
Laser class	Class 1

RC-800

Auto Ref-Keratometer

The RC-800 is an integral part of today's eye diagnostics. Highly accurate measurements in conjunction with a very short examination time and easy handling make working with the TOMEY RC-800 fast and professional. You can operate and align the RC-800 with a combination of joystick and touch screen – all in a minimum of time.



Excellent features

- + Central K-values
- + Pupil and cornea \varnothing measurement
- + Colour touch screen
- + Auto-measurement
- + High-speed printer
- + High accuracy

Specifications

REFRACTIVE POWER MEASUREMENT

SPHERICAL REFRACTIVE POWER (S)

Measurement range	-25.00 D to +22.00 D (at VD=12.0 mm)
Display unit	0.01 D, 0.12 D, 0.25 D
Minimum pupil diameter	\varnothing 2.0 mm

CYLINDRICAL REFRACTIVE POWER (C)

Measurement range	0.00 D to \pm 10.00 D (at VD=12.0 mm)
Display unit	0.01 D, 0.12 D, 0.25 D

ASTIGMATISM AXIAL (A)

Measurement range	0° to 180°
Display unit	1°, 5°

CORNEAL CURVATURE RADIUS MEASUREMENT

CORNEAL CURVATURE RADIUS (K1, K2, AVG)

Measurement range	5.00 mm to 11.00 mm
Display unit	0.01 mm

CORNEAL ASTIGMATISM AND AXIS (C, A)

Measurement range (C)	0 D to 10 D (n=1.3375)
Measurement range (A)	0° to 180°
Measurement area cornea	\varnothing 3.0 mm (at 8.00 mm corneal curvature)

AUXILIARY FUNCTION

PD range	50 to 86 mm
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MAIN UNIT

Built-in printer	Thermal printer
Output	RS-232C, USB B
Display	5.7" colour LCD

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	297 x 500 x 448 mm
Weight	approx. 17 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	85 VA to 100 VA

RC-900

Auto Ref-Keratometer

The RC-900 delivers reliable results within a very short time. Its semi auto-tracking and auto-measurement function support the user very well. The touch monitor can be tilted and swivelled in any direction for comfortable operation. Thanks to retroillumination, the observation of cataract conditions or scratches on contact lenses is also available.

Excellent features

- + Semi auto-tracking
- + Auto-measurement
- + Peripheral keratometry
- + Retroillumination
- + Large measuring range
- + Rotatable monitor
- + Video out (VGA)
- + WiFi and serial connection to TAP-2000



Specifications

REFRACTIVE POWER MEASUREMENT

SPHERICAL REFRACTIVE POWER (S)

Measurement range	-30.00 D to +25.00 D
Display unit	0.12 D / 0.25 D
Minimum pupil diameter	2.0 mm

CYLINDRICAL REFRACTIVE POWER (C)

Measurement range	0.00 D to 10.00 D
Display unit	0.12 D / 0.25 D

ASTIGMATISM AXIAL (A)

Measurement range	0° to 180°
Display unit	1°

CORNEAL CURVATURE RADIUS MEASUREMENT

CORNEAL CURVATURE RADIUS (K1, K2, AVG)

Measurement range	5.00 mm to 13.00 mm
Display unit	0.01 mm

CORNEAL ASTIGMATISM AND AXIS (C, A)

Measurement range (C)	0.00 D to -15.0 D
Measurement range (A)	0° to 180°
Measurement area cornea	Central & peripheral

AUXILIARY FUNCTION

PD range	10 mm to 88 mm
Retroillumination	Available

MAIN UNIT

Alignment	Semi auto
Built-in printer	Thermal printer
Output	WiFi, RS 232 C, USB, VGA
Display	7" TFT-LCD tilting/swivel

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	260 x 500 x 450 mm
Weight	approx. 20 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	40 VA to 60 VA

RC-5000

Auto Ref-Keratometer

Thanks to the electronics-controlled movement, you can operate and align the RC-5000 with the power motion joystick and/or touch screen – quick and easy. Highly accurate measurements combined with the very short examination time and easy handling make working with the TOMEY RC-5000 fast and professional.

Excellent features

- + Central and peripheral K-values
- + Colour touch screen
- + Pupil and cornea \varnothing measurement
- + Auto alignment and auto measurement
- + Power motion joystick



Specifications

REFRACTIVE POWER MEASUREMENT

SPHERICAL REFRACTIVE POWER (S)

Measurement range	-25.00 D to +22.00 D (at VD=12.0 mm)
Display unit	0.01 D, 0.12 D, 0.25 D
Minimum pupil diameter	\varnothing 2.2 mm

CYLINDRICAL REFRACTIVE POWER (C)

Measurement range	0.00 D to \pm 10.00 D (at VD=12.0 mm)
Display unit	0.01 D, 0.12 D, 0.25 D

ASTIGMATISM AXIAL (A)

Measurement range	0° to 180°
Display unit	1°

CORNEAL CURVATURE RADIUS MEASUREMENT

CORNEAL CURVATURE RADIUS (K1, K2, AVG)

Measurement range	5.00 mm to 11.00 mm
Display unit	0.01 mm

CORNEAL ASTIGMATISM AND AXIS (C, A)

Measurement range (C)	0 D to 10 D (n=1.3375)
Measurement range (A)	0° to 180°
Measurement area cornea	\varnothing 3.0 mm / \varnothing 6.0 mm (at 8.00 mm corneal curvature)

AUXILIARY FUNCTION

PD range	50 to 86 mm
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MAIN UNIT

Built-in printer	Thermal printer
Output	RS-232C
Display	5.7" colour LCD

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	300 × 493 × 466 mm
Weight	approx. 19 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	130 VA to 150 VA

TMP-800

Manual Phoropter

The TMP-800's mechanics and lenses are of high quality. Standard accessory lenses as well as prism and cross-cylinder lenses complete the manual phoropter package. It's perfect for reliably performing traditional refraction exams.

Excellent features

- + Multi-coated lenses
- + High-quality mechanics
- + Near-vision equipment
- + Variety of optical and accessory lenses
- + Individual adjustment



Specifications

MEASUREMENT RANGE

Spherical power	-19.00 to +16.75 D (0.12, 0.25 D steps)
Cylindrical power	0.00 to -6.00 D (0.12, 0.25 D steps) 0.00 to -8.00 D (when additional lens is used)
Cylindrical axis	0° to 180°
Prism	0 to 20 Δ (1 Δ step)
PD	50 to 80 mm

REFRACTOR HEAD

Auxiliary lenses	Occluder, pinhole, red/green filter, polarising filter (45°/135°), fixed cross-cylinder lens (±0.50 D), red/white Maddox rod vertical/ horizontal, prism (6, 10 Δ I, U), +0.12 D lens
Cross-cylinder	±0.25 D
Add. lens set	2x cylinder lenses -0.12 D, -2.00 D
Retinoscopy	+2.00 D for 50 cm
Effective field of view	18.5 mm

DIMENSIONS

Dimensions WDH	340 × 110 × 310 mm
Weight	4.8 kg

TMP-2000

Manual Phoropter

The TMP-2000 ensures high quality in every detail. The precise and easy motion of the TMP-2000 enables a smooth performance of all tests and refractive procedures.

Excellent features

- + Premium quality
- + High-grade coating on all lenses
- + Precise and easy motion
- + Cross-cylinder and rotary prism
- + Near-vision chart and auxiliary lenses
- + Convergence system



Specifications

MEASUREMENT RANGE

Spherical power	-19.00 to +16.75 D (0.12, 0.25 D step)
Cylindrical power	0.00 to -6.00 D (0.12, 0.25 D step) 0.00 to -8.00 D (when auxiliary lens is in use)
Cylindrical axis	0° to 180° (5° steps)
PD	48 to 80 mm
Prism	0 to 20Δ (1Δ step)

REFRACTOR HEAD

Auxiliary lenses	Occluder, Pinhole, Red/green filter, Polarising filter (45°/135°), Fixed cross-cylinder lens (±0.50 D), Red/white Maddox rod vertical/ horizontal, Prism (6, 10Δ I, U), +0.12 D lens
Cross-cylinder	±0.25 D
Add. lens set	2x cylinder lenses -0.12, -2.00 D
Retinoscopy	+2.00 D for 50 cm
Field of view	19 mm

DIMENSIONS

Dimensions WDH	323 x 85 x 315 mm
Weight	4.75 kg

TAP-2000

Automated Phoropter

The automated phoropter TAP-2000 is the optimal product for establishing a personalised work routine for an all-around refraction. The phoropter supports the performance of the various measurement options by displaying useful tips. The TAP-2000 is also compatible with other TOMEY equipment including lensmeter, auto-refraction, chart panel and chart projector.

Excellent features

- + Ergonomic control panel
- + Custom work routine
- + Numerous tests
- + Compatible with various TOMEY equipment
- + Wide visual field
- + Dual cross-cylinders for high efficiency



Specifications

MEASUREMENT RANGE

Spherical power	-29.00 to +26.75 D (0.12/ 0.25/ 1.00/ 2.00/ 3.00 D step)
Cylindrical power	0.00 to ±8.75 D (0.25/ 1.00/ 2.00/ 3.00 D step)
Cylindrical axis	0 to 180° (1°/ 5°/ 15° step)
Pupillary distance	48 to 80 mm (far) / 50 to 74 mm (near)
Prism	0 to 20Δ (0.1Δ/ 0.5Δ/ 2Δ step)

REFRACTOR HEAD

Auxiliary lens	Occluder, Pinhole (φ2 mm), Red-green filter, Linear polarising filter, Fixed cross-cylinder lens (±0.50 D), Red Maddox rod, Dissociation prism (3/ 6/ 10Δ)
Cross-cylinder	±0.25 D, ±0.50 D
Retinoscopy	+1.5 D / +2.0 D
Visual field	40° (VD = 12 mm)
Level adjustment	±2.5°
PD adjustment	Monocular/binocular

NEAR VISION

Working distance	35 to 70 cm (5 cm step)
Near point chart illumination	LED light

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Phoropter head

Dimensions WDH	410 x 65 x 320 mm
Weight	3.9 kg
Phoropter arm holder	Ø 21 mm ±0.5 mm

Control box

Dimensions WDH	230 x 235 x 65 mm
Weight	3.4 kg
Display	10.4" colour TFT-LCD with touch panel
Printer	Built-in thermal

Power specifications

Voltage	110 VAC to 220 VAC (±10%)
Frequency	50/60 Hz
Power consumption	220 VA to 270 VA

TCP-4042

Automated Chart Projector

The TCP-4042 not only provides standard optotypes for measuring visual acuity; it also comes with tests for astigmatism, binocular balance, fixation disparity, fusion and stereo vision. Operate the TCP-4042 as a stand-alone device along with Trial Frame 10 and Trial Lens Set 266 – or take advantage of its convenient compatibility with the TAP-2000.

Excellent features

- + Bright and clear chart projection
- + Smart selection of charts
- + Connection to TAP-2000
- + Refined design and compact size
- + Convenient focus adjustment
- + Maintenance-free LED light
- + 42 charts



Specifications

SPECIFICATIONS

Number of charts	42 charts
Distance of projection	2.5-8.0 m (8 m distance projection screen is optional)
Chart magnification	30x (when projected at 5 m distance)
Light source	LED Lamp
Connector	RS-232C
Chart rotation speed	Average 0.3 sec
Power save	11 minutes (after last signal)
Tilt angle	±20 degrees
Resolution	50 lines/mm
Programme	2 programmes with a maximum of 40 charts each

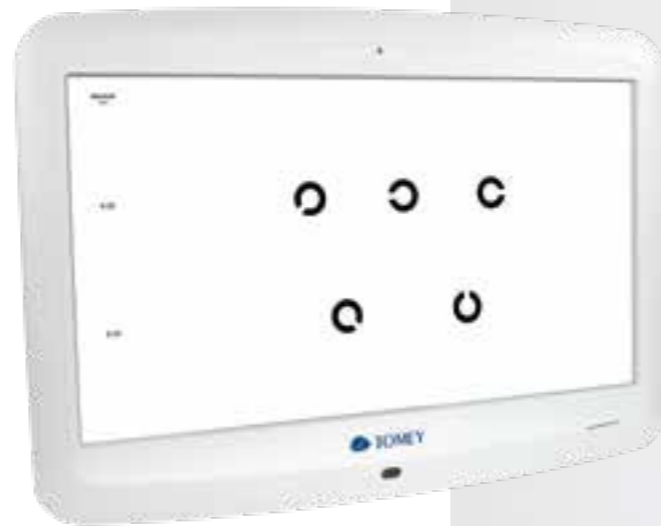
DIMENSIONS AND ELECTRICAL REQUIREMENTS

Body (except stand) WDH	200 × 290 × 172 mm
Body (stand included) WDH	200 × 290 × 235 mm
Weight (stand included)	3.6 kg
Weight (Remote control)	160 g (battery included)
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	25 VA to 35 VA

Chart Panels

TCP-2000A/TCP-4000

The non-polarised chart panels combine a wide variety of standard vision tests with a broad range of special charts, including Red-Green tests, Amsler test and colour vision tests. Operate the panels via remote control or wireless connection with the TAP-2000 automated phoropter.



TCP-4000



TCP-2000A

Specifications

	TCP-2000A	TCP-4000
FEATURES		
Working distance 2 m to 7 m	x	x
Visus units: Decimal, LogMar, Metric, Feet	x	x
Display size (LCD Full-HD)	24"	24"
Image separation: Red-Green	x	x
IR remote control (3 channels)	x	x
System integration to automated phoropter	x	x
IR connection via CommBox (optional)	x	
WiFi / Bluetooth connection		x
Multilingual user interface	x	x
Wall mount adapter (VESA 100)	x	x
USB Port	x	x
OPTOTYPES		
Osterberg	x	
ETDRS	x	x
Crowding bars	x	x
Hearing impaired	x	
Low vision	x	x
Contrast adjustment of optotypes	x	x
VA TESTS		
Cross grid	x	x
Amsler grid	x	x
Astigmatism dots	x	x
Astigmatism clock	x	x
BINOCULAR TESTS RED-GREEN		
Schober	x	x
Worth	x	x
Fixation disparity	x	x
Bichrome-balance	x	x
SPECIAL TESTS		
Contrast sensitivity	x	
Colour vision test	x	x
Colour sensitivity	x	
Animations	x	
MASKS		
Single optotype, horiz. / vertic. line	x	x
Red-Green	x	x
DIMENSIONS AND ELECTRICAL REQUIREMENTS		
Dimensions WDH (incl. frame) in mm	605 x 30 x 370	583 x 55 x 423
Weight	3.8 kg	5.7 kg
Voltage	100 to 240 VAC	100 to 240 VAC
Frequency	50/60 Hz	50/60 Hz
Power consumption	60 W	35 to 45 VA

Excellent features

TCP-2000A

- + Comprehensive test selection
- + Contrast sensitivity test
- + Snellen charts, ETDRS, crowding bars
- + Low-vision charts
- + Programmable chart sequences

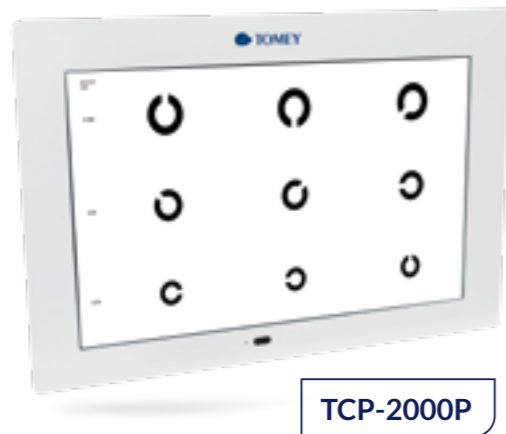
TCP-4000

- + Change different optotypes and visus options with a single click
- + Bluetooth or WiFi connection to TAP-2000
- + Large variety of vision tests
- + Snellen charts, ETDRS, crowding bars
- + Low-vision charts
- + Programmable chart sequences

Polarising Chart Panels

TCP-2000P / TCP-3000P / TCP-3000PX / TCP-4000P

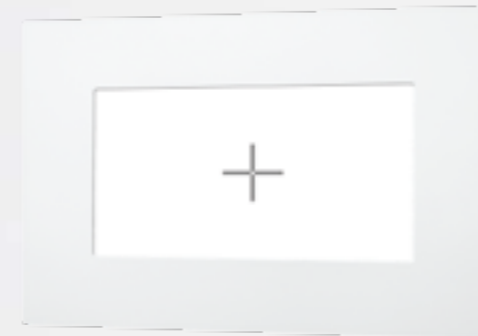
In addition to all essential vision tests, the polarised chart panels provide stereo tests and special tests to examine heterophoria. All chart panels are linear polarised and can be controlled by the TAP-2000 automated phoropter or remote control.



TCP-2000P



TCP-3000P



TCP-3000PX



TCP-4000P

Excellent features

TCP-2000P

- + Driver's licence test equipment (optional)
- + Accurate linear polarisation
- + Infrared connection to TAP-2000 (optional)
- + Contrast sensitivity test
- + Printable test reports
- + Programmable chart sequences

TCP-3000P

- + Extensive chart selection
- + Precise linear polarisation
- + Infrared connection to TAP-2000 (optional)
- + Contrast sensitivity test
- + Printable test reports
- + Programmable chart sequences

TCP-3000PX

- + Large non-fixation monitor frame
- + Full MKH test sequence
- + Precise linear polarisation
- + Infrared connection to TAP-2000 (optional)
- + Contrast sensitivity test
- + Printable test reports
- + Programmable chart sequences

TCP-4000P

- + Change different optotypes and visus options with a single click
- + Bluetooth or WiFi connection to TAP-2000
- + Precise linear polarisation
- + Full MKH test sequence
- + Programmable chart sequences

Specifications

	TCP-2000P	TCP-3000P/PX	TCP-4000P
FEATURES			
Working distance 2 m to 7 m	x	x	x
Visus units: Decimal, LogMar, Metric, Feet	x	x	x
Display size (LCD Full-HD)	23"	24"	24"
Image separation: Red-Green	x	x	x
Image separation: polarising	x	x	x
MKH test sequence		x (PX only)	x
Driver's licence sequence	x		
IR remote control (3 channels)	x	x	x
System integration to automated phoropter	x	x	x
IR connection via CommBox (optional)	x	x	
WiFi / Bluetooth connection			x
Multilingual user interface	x	x	x
Wall mount adapter (VESA 100)	x	x	x
USB Port	x	x	x
OPTOTYPES			
Osterberg	x	x	
ETDRS	x	x	x
Crowding bars	x	x	x
Hearing impaired	x	x	
Low vision	x	x	x
Contrast adjustment of optotypes	x	x	x
VA TESTS			
Cross grid	x	x	x
Amsler grid	x	x	x
Astigmatism dots	x	x	x
Astigmatism clock	x	x	x
BINOCULAR TESTS RED-GREEN			
Schober	x	x	x
Worth	x	x	x
Fixation disparity	x	x	x
Bichrome-balance	x	x	x
BINOCULAR TESTS POLARISING			
VA balance	x	x	x
Horiz. / vertic. coincidence	x	x	x
Polarising Red-Green	x	x	x
3D images	x	x	
SPECIAL TESTS			
Contrast sensitivity	x	x	
Colour vision test	x	x	x
Colour sensitivity	x	x	
Animations	x	x	
MASKS			
Single optotype, horiz. / vertic. line	x	x	x
Red-Green	x	x	x
Polarising	x	x	x
DIMENSIONS AND ELECTRICAL REQUIREMENTS			
Dimensions WDH (incl. frame) in mm	585 x 30 x 360	605 x 30 x 370	583 x 55 x 423
Weight	3.9 kg	3.8 kg	5.7 kg
Voltage	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Power consumption	60 W	60 W	35 to 45 VA

TL-6000/TL-7000

Automated Lensmeter

The 117-point Hartmann sensor wavefront technology in the TL-6000 and TL-7000 enables high measurement accuracy and speed for all types of lenses.

Excellent features

- + Wavefront technology with Hartmann sensor (117 points)
- + Simultaneous measurement of UV/blue light and lens power
- + Lens mark recognition support
- + Basic power-mapping
- + LAN and RS-232C connection
- + WiFi connection and PD measurement for TL-7000 only



TL-6000



TL-7000

Specifications

MEASUREMENT RANGE

Spherical power (SPH)	±25 D
Cylindrical power (CYL)	±10 D
Axial angle (AXIS)	0° to 180°
Additional power	-2 to +10 D
Prism power	0 to 15 Δ

MEASUREMENT INCREMENT

Dioptre	0.01/ 0.06/ 0.12/ 0.25 D
Prism	0.01/ 0.06/ 0.12/ 0.25 Δ

MEASUREMENT PARAMETERS

Wavelength	535 nm
Transmittance of UV light	The peak of the wavelength is 375 nm
Transmittance of blue light	The peak of the wavelength is 465 nm
Measurement objects	Spectacle lens, contact lens
Diameter of the lens	20 to 120 mm, > 5 mm for CL
Pupillary distance	40 to 86 mm, step: 0.5 mm (for TL-7000 only)

HARDWARE PARAMETERS

Display	7.0" colour TFT-LCD, with touch panel
Printer	Thermal printer
Output	RS-232C, USB 2.0, Ethernet, WiFi (for TL-7000 only)

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	188 x 240 x 430 mm (when LCD is tilted)
Weight	approx. 5.5 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	40 VA to 50 VA

TL-6100/TL-7100

Automated Lensmeter

The automated lensmeters TL-6100 and TL-7100 accurately measure the power of optical lenses and rigid contact lenses using Shack-Hartmann wavefront sensor technology. UV light and blue light transmittance can also be determined at defined wavelengths.

Excellent features

- + Shack-Hartmann wavefront sensor technology (145 points)
- + Wavelength of e-line or d-line and Abbe compensation
- + Automatic lens detection and automated measurement
- + Measurement of UV and blue light transmittance
- + Integrated universal lens marking tool for any type of coating
- + 7" LCD touch screen with tilting function
- + Power measurement of rigid contact lenses
- + PD measurement and WiFi connection for TL-7100 only



TL-6100



TL-7100

Specifications

MEASUREMENT RANGE

Spherical power (SPH)	±25 D
Cylindrical power (CYL)	±10 D
Axial angle (AXIS)	0° to 180°
Additional power	0 to +10 D
Prism power	0 to 20 Δ

MEASUREMENT INCREMENT

Dioptre	0.01/ 0.06/ 0.12/ 0.25 D
Prism	0.01/ 0.06/ 0.12/ 0.25 Δ

MEASUREMENT PARAMETERS

Wavelength	525 nm, e-line 546.07 nm, d-line 587.56 nm
Transmittance of UV light	400 nm
Transmittance of blue light	420 nm
Abbe value	30-60
Diameter of the lens	5 to 120 mm
Pupillary distance	45 to 90 mm (for TL-7100 only)

HARDWARE PARAMETERS

Display	7.0" TFT colour LCD touch screen
Printer	Thermal printer
Output	RS-232C, WiFi (for TL-7100 only)

DIMENSIONS AND ELECTRICAL REQUIREMENTS

Dimensions WDH	198 x 245 x 420 mm
Weight	approx. 5 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	35 VA to 55 VA

Slit Lamps

TSL-900H/TSL-900Hdigital/TSL-900Z

The TOMEY TSL-900 series leaves nothing to be desired. Easy and ergonomic handling, high quality, accuracy and reliability are provided. Our slit lamps are equipped with a complete filter set-up and many accessories, including a yellow filter module, applanation tonometer, measuring eyepiece and mounting plate. It's your complete slit lamp solution.

Excellent features

- + High-quality optics
- + LED illumination
- + Rotating drum with five-step magnification
- + Multiple integrated filters
- + Ergonomic operation

TSL-900Hdigital only

- + High-resolution digital imaging system with 5.0 M pixels
- + Imaging system with direct HDMI output



TSL-900Hdigital



TSL-900H



TSL-900Z

Specifications

	TSL-900H/TSL-900Hdigital	TSL-900Z
OPTICAL SYSTEM		
Type	Galilean converging binoculars 10°	
Magnification	Rotating drum change x6, x10, x16, x25, x40	
Eyepiece	x12.5	
Field of view	40x (Ø 5.7 mm), 25x (Ø 8.9 mm), 16x (Ø 14 mm), 10x (Ø 22.3 mm), 6x (Ø 36.2 mm)	
Interpupillary distance	52 mm to 80 mm	
Objective lens convergence angle	13°	
Dioptre adjustment	±8 D	

SLIT PROJECTION AND BASE		
Slit width	0 to 14 mm continuously variable	
Slit length	1 to 14 mm continuously variable	
Aperture diameters	Ø 14 mm, Ø 10 mm, Ø 5 mm, Ø 3 mm, Ø 1 mm, Ø 0.2 mm, Ø 14 mm, Ø 8 mm, Ø 5 mm, Ø 3 mm, Ø 0.2 mm	
Filters	Heat-absorbing filter, red-free filter, cobalt blue filter, ND filter, diffuser	
Slit angle	±90° continuous	
Slit inclination	4 step: 5°, 10°, 15°, 20°	
Base travel	30 mm z-axis, 110 mm x-axis, 115 mm y-axis	
Horizontal fine adjustment	12 mm	
Fixation lamp	LED	
Light source	LED / 12 V	
Luminance	≥150klx	

ADDITIONAL FEATURES		
Optional features	Yellow filter integrated to optical body	
Optional devices	TAT-80R, measuring eyepiece	

DIMENSIONS AND ELECTRICAL REQUIREMENTS		
Dimensions WDH	330 x 390-460 x 650 mm	330 x 390-460 x 460 mm
Weight	17 kg	16 kg
Power supply unit	100-240 V, 50/60 Hz	
Power supply output	12-15 V DC	

TSL-900Hdigital only

SPECIFICATIONS		
Illumination system	External LED background illumination system, IR background illumination module	

Digital versions only

CAMERA SYSTEM		
Resolution	5 megapixels, 2592 x 1944 12 megapixels, 4056 x 3040	
Connectivity	USB 3.0 high-speed 480 Mbps port	
Sensor type	1/4-inch high-speed high-definition image sensor	
Video format	MP4 H.264, 2592 x 1944	
Frame rate	30 fps	
Exposure mode	Automatic exposure, automatic gain	

Slit Lamps

TSL-4000H / TSL-4000Z

The TSL-4000H and TSL-4000Z are equipped with a 3-step magnification. Combined with stylish design and modern technology, high quality, accuracy and reliability are provided. Enjoy the difference with its easy handling and ideally located on-board illumination control that support your daily workflow very well. This perfect diagnostic tool offers you and your patients a high level of examination accuracy.

Excellent features

- + Elegant design
- + Integrated yellow filter
- + Exceptional optics
- + Outstanding reliability
- + 3-step magnification changer
- + LED illumination
- + Extensive filter and accessory set



TSL-4000Z



TSL-4000H

Specifications

	TSL-4000H	TSL-4000Z
OPTICAL SYSTEM		
Type	Galilean converging binoculars 8°	
Magnification	Rotating drum change x10, x16, x25	
Eyepiece	x12.5	
Field of view	34, 22, 14, 8.5, 5.5 mm	
Interpupillary distance	49 to 77 mm	
Objective lens focal distance	107 mm	
Objective lens convergence angle	13°	

SLIT PROJECTION AND BASE		
Slit width	0-12 mm continuously variable	0-14 mm continuously variable
Slit length	12 mm (1.0-12 mm continuously variable)	14 mm (1.0-14 mm continuously variable)
Aperture diameters	0.2, 1 mm square, 2, 3, 5, 9, 12 mm	0.2, 1 mm square, 2, 3, 5, 9, 14 mm
Filters	Clear, red free, neutral density, diffuser, blue, IR heat-absorbing filter permanently installed	
Slit angle	±90° continuous	
Slit rotation	±90° with reference scale	
Base travel	25 mm z-axis, 107 mm x-axis, 110 mm y-axis	
Horizontal fine adjustment	12 mm	
Fixation lamp	LED	
Light source	LED / 12 V	

ADDITIONAL FEATURES		
Optional features	Auxiliary diffuser, yellow filter integrated to optical body	
Optional devices	TAT-100R	

DIMENSIONS AND ELECTRICAL REQUIREMENTS		
Dimensions WDH	350 x 410 x 702 mm	350 x 432 x 604 mm
Weight	approx. 21 kg	approx. 19 kg
Power supply unit	Switch mode, (100-240V input) ±10% multi plug compliant to EN 60601-1, EN 61000-6-2, EN 61000-6-3	
Power supply output	12 V DC / 2.5 A IEC / EN 60 6001	

Slit Lamps

TSL-7000H/TSL-7000Hdigital/TSL-7000Z/TSL-7000Zdigital

Combining stylish beauty and modern technology, our TSL-7000H and TSL-7000Z with 5-step magnification represent optimal design and substance. Enjoy the difference with its easy handling and ideally located on-board illumination control – where high quality, accuracy and reliability are provided. Every day you'll rely more on this perfect diagnostic tool that offers your patients a high level of examination accuracy.



TSL-7000Hdigital



TSL-7000Zdigital



TSL-7000H



TSL-7000Z

Specifications

	TSL-7000H / digital	TSL-7000Z / digital
OPTICAL SYSTEM		
Type	Galilean converging binoculars 8°	Galilean converging binoculars 8° / parallel binoculars
Magnification	Rotating drum change x6, x10, x16, x25, x40	Rotating drum change x6, x10, x16, x25, x40 / x10, x16, x25
Eyepiece	x12.5	
Field of view	34, 22, 14, 8.5, 5.5 mm	34, 22, 14, 8.5, 5.5 mm / 22, 14, 8.5 mm
Interpupillary distance	49 to 77 mm	
Objective lens focal distance	107 mm	
Objective lens convergence angle	13°	

SLIT PROJECTION AND BASE		
Slit width	0-12 mm continuously variable	0-14 mm continuously variable
Slit length	12 mm (1.0-12 mm continuously variable)	14 mm (1.0-14 mm continuously variable)
Aperture diameters	0.2, 1 mm square, 2, 3, 5, 9, 12 mm	0.2, 1 mm square, 2, 3, 5, 9, 14 mm
Filters	Clear, red free, neutral density, diffuser, blue, IR heat-absorbing filter permanently installed	
Slit angle	±90° continuous	
Slit rotation	±90° with reference scale	
Base travel	25 mm z-axis, 107 mm x-axis, 110 mm y-axis	
Horizontal fine adjustment	12 mm	
Fixation lamp	LED	
Light source	LED / 12 V	

ADDITIONAL FEATURES	
Optional features	Auxiliary diffuser, yellow filter integrated to optical body
Optional devices	TAT-100R

DIMENSIONS AND ELECTRICAL REQUIREMENTS		
Dimensions WDH	350 x 410 x 702 mm	350 x 432 x 604 mm
Weight	approx. 21 kg	approx. 19 kg
Power supply unit	Switch mode, (100-240V input) ±10% multi plug compliant to EN 60601-1, EN 61000-6-2, EN 61000-6-3	
Power supply output	12 V DC / 2.5 A IEC / EN 60 6001	

SPECIFICATIONS	
Base unit	Integral USB hub, joystick trigger system, auto left / right detection, ±camera exposure controls, freeze frame image review control
Illumination system	External LED background illumination system, blue filter for background illumination system

CAMERA SYSTEM	
Resolution	3 megapixels: 2048 x 1536
Connectivity	USB 3.0
Sensor type	CCD
Chip size	1 / 1.8"
Framerate	17.5 fps

Excellent features

- + 5-step magnification changer
- + Extensive filter and accessory set with integrated yellow filter
- + Elegant design
- + Exceptional optics
- + LED illumination

Digital versions only

- + Workstation with application software
- + Integrated, highly sophisticated camera system

Refraction Accessories

Trial Frame 10

The Trial Frame 10 offers space for a total of 10 trial lenses at 38 mm in diameter. Thanks to its many adjustment options and the second nose bridge in a smaller size, the Trial Frame 10 can be optimally adjusted to every face shape.

Trial Lens Set 266

The Trial Lens Set 266 comes as a carrying case equipped with a wooden tray and 266 trial lenses. With plastic rims at 38 mm in diameter, the lenses are compatible with the TOMEY Trial Frame 10. To complete the Trial Lens Set 266, two cross-cylinders and a microfiber cloth are included.

Perimeter Lens Set 68

The Perimeter Lens Set 68 helps determine the field of vision, even in people with ametropia. The 68 lenses fit perfectly into the lens holders in all TOMEY perimeters. Thanks to the thin metal frame on the lenses, the size of the visual field during perimeter examination is barely affected. A microfiber cloth is included.



Trial Frame 10



Trial Lens Set 266



Perimeter Lens Set 68

Specifications

Trial Frame 10	
SPECIFICATIONS	
Axial scale steps	5°
Lens holder load capacity	5 standard trial lenses each on right/left side
Range of PD scale	50-80 mm
Range of nose bridge adjustment	Height: 0-23 mm Angle: 0°-360°
Weight	61 g

Trial Lens Set 266	
SPECIFICATIONS	
Spherical lenses	+/- 20.00 D
Cylindrical lenses	+/- 6.00 D
Prism lenses	0.50 - 10.00 PD
Cross-cylinder	+/- 0.25 // +/- 0.50
Accessory lenses	12 pieces
Plastic rim diameter	38 mm
Lens diameter	25 mm

Perimeter Lens Set 68	
SPECIFICATIONS	
Spherical lenses	+/- 16.00 D
Cylindrical lenses	0.25 - 6.00 D
Metal rim diameter	38 mm
Lens diameter	36 mm

Excellent features

Trial Frame 10

- + 10 trial lenses at 38 mm in diameter
- + Many adjustment options
- + Second nose bridge in a smaller size
- + Ideal adjustment to every face shape

Trial Lens Set 266

- + Carrying case equipped with a wooden tray
- + 266 trial lenses
- + Plastic rims at 38 mm in diameter
- + Compatible with TOMEY Trial Frame 10
- + Two cross-cylinders and a microfiber cloth

Perimeter Lens Set 68

- + 68 lenses with thin metal frames
- + Fits perfectly into lens holders in all TOMEY perimeters
- + Suitable for patients with ametropia
- + Includes a microfiber cloth



Furniture

TOMEY furniture provides a stable base for measuring instruments and supports the safe performance of eye examinations.



“OUR SOLID FURNITURE OFFERS OPTIMAL PERFORMANCE FOR THE OPERATOR AND HIGHEST PATIENT COMFORT AT THE SAME TIME.”

Richard Beneditt

HEAD OF SALES

Refraction Unit

TRU-800	p. 66
TRU-1000	p. 68
TRU-2000	p. 70
TRU-2500	p. 72

Electrical Lift Table

TTUD-1000/ TT2C-1000/ TT2C-800	p. 74
TT-1060/ TT-4060/ TTVS-1000	p. 76

TRU-800

Refraction Unit

Perfect if you need a smart and tiny solution for your refraction environment. Thanks to its small size, it can fit into very restricted spaces. It's very easy to attach all your essential instruments such as phoropters and chart projectors to the TRU-800. If you want to store handheld units or trial lenses, the optional trial lens cabinet TC-1000 is the ideal partner.

Excellent features

- + Space-saving (1.55 m²)
- + Includes chair SC-1000
- + Easy to install (right or left side)
- + Timeless and modern design



Specifications

FEATURES

Table	Rotating 90°, laterally movable, for 2 devices
Table height adjustment	Not available
Table lock	Magnetic
Max. load capacity (table)	50 kg
Patient chair	SC-100
Patient chair elevation	200 mm
Max. load capacity (chair)	150 kg
Projector column height	approx. 1700 mm
Connectors	2x power outlet (230 V) 1x RS-232, 1x 6-pin (6 V / 12 V), 1x LAN, 1x USB 2.0
Reading light	Cold white LED 12 V
Internal light	Cold white LED 12 V

ELECTRIC REQUIREMENTS & WEIGHT

Power consumption	280 VA
Power supply	110/115 V AC/230 V AC ±10 %
Total weight (incl. chair)	approx. 157 kg

DIMENSIONS

Width	max. 1272 mm (±10 mm)
Height	max. 1700 mm (±10 mm)
Depth	max. 1506 mm (±10 mm)
Table	870 x 440 mm (±5 mm)

OPTIONAL

Optional equipment	PA-1000 Phoropter arm "balance" PA-3000 Phoropter arm "linear" SH-1000 Skiascope/Ophthalmoscope holder TC-1000 Trial lens cabinet CBS-1000 Control box stand
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TRU-1000

Refraction Unit

The ultimate combination of comfort, elegance and functionality. Our TRU-1000 delivers maximum flexibility and convenience in a remarkably compact footprint. Its modern and plain design fits in any examination room.



Excellent features

- + Space-saving
- + Preconfigured for TOMEY equipment
- + Easy to install (right or left side)
- + Timeless and modern design

Specifications

FEATURES

Table	Rotating 90°, laterally movable, for 2 devices
Table height adjustment	Not available
Table lock	Magnetic
Max. load capacity (table)	50 kg
Patient chair	ER-3000
Patient chair elevation	200 mm
Max. load capacity (chair)	150 kg
Projector column height	approx. 1700 mm
Connectors	2x power outlet (230 V) 1x RS-232, 1x 6-pin (6 V / 12 V), 1x LAN, 1x USB 2.0
Reading light	Cold white LED 12 V
Internal light	Cold white LED 12 V

ELECTRIC REQUIREMENTS & WEIGHT

Power consumption	280 VA
Power supply	110/115 V AC/230 V AC ±10 %
Total weight (incl. chair)	approx. 250 kg

DIMENSIONS

Width	max. 1300 mm (±10 mm)
Height	max. 1750 mm (±10 mm)
Depth	max. 1820 mm (±10 mm)
Table	870 x 440 mm (±5 mm)

OPTIONAL

Optional equipment	PA-1000 Phoropter arm "balance" PA-3000 Phoropter arm "linear" SH-1000 Skiascope/Ophthalmoscope holder TC-1000 Trial lens cabinet CBS-1000 Control box stand
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TRU-2000

Refraction Unit

Display your clinical excellence confidently with the TOMEY refraction unit TRU-2000. Its high functionality, combined with classic design and the comfortable chair, provide a reliable basis for all eye examinations.



Excellent features

- + Space-saving
- + Preconfigured for TOMEY equipment
- + Personal touch with internal LED light
- + Easy to install (right or left side)
- + Timeless yet innovative
- + Comfortable motorised chair with tilting action

Specifications

FEATURES	
Table	Rotating 90°, laterally movable, for 2 devices
Table height adjustment	Not available
Table lock	Magnetic
Max. load capacity (table)	50 kg
Patient chair	ER-1000
Patient chair elevation	200 mm
Max. load capacity (chair)	150 kg
Projector column height	approx. 1700 mm
Connectors	2x power outlet (230 V) 1x RS-232, 1x 6-pin (6 V / 12 V), 1x LAN, 1x USB 2.0
Reading light	White LED 12 V
Internal light	RGB LED 12 V

ELECTRIC REQUIREMENTS & WEIGHT	
Power consumption	280 VA
Power supply	110/115 V AC/230 V AC ±10 %
Total weight (incl. chair)	approx. 270 kg

DIMENSIONS	
Width	max. 1440 mm (±10 mm)
Height	max. 1750 mm (±10 mm)
Depth	max. 2360 mm (±10 mm)
Table	870 x 440 mm (±5 mm)

OPTIONAL	
Optional equipment	PA-1000 Phoropter arm "balance" PA-3000 Phoropter arm "linear" SH-1000 Skiascope/Ophthalmoscope holder TC-1000 Trial lens cabinet CBS-1000 Control box stand

TRU-2500

Refraction Unit

The TRU-2500 fulfils all wishes in terms of functionality and comfort. The tabletop of the unit is equipped with a convenient electrical height adjustment. The patient chair comes with a manual 90° side-rotation function. Both functions support a smooth and comfortable workflow.



Excellent features

- + Space-saving with integrated accessory drawer
- + Easy to install (right or left side)
- + Comfortable motorised chair with tilting action
- + Motorised height-adjustable table
- + Preconfigured for TOMEY equipment
- + Personal touch with internal LED light
- + Magnetic table-locking

Specifications

FEATURES	
Table	Rotating 90°, laterally movable, for 2 devices
Table height adjustment	Electrical 100 mm, 820-920 mm
Table lock	Magnetic
Max. load capacity (table)	50 kg
Patient chair	ER-1000/R
Patient chair elevation	200 mm
Max. load capacity (chair)	150 kg
Projector column height	approx. 1700 mm
Connectors	2x power outlet (230 V) 1x RS-232, 1x 6-pin (6 V / 12 V), 1x LAN, 1x USB 2.0
Reading light	White LED 12 V
Internal light	RGB LED 12 V

ELECTRIC REQUIREMENTS & WEIGHT	
Power consumption	280 VA
Power supply	110/115 V AC/230 V AC ±10 %
Total weight (incl. chair)	approx. 270 kg

DIMENSIONS	
Width	max. 1440 mm (±10 mm)
Height	max. 1750 mm (±10 mm)
Depth	max. 2360 mm (±10 mm)
Table	870 x 440 mm (±5 mm)

OPTIONAL	
Optional equipment	PA-1000 Phoropter arm "balance" PA-3000 Phoropter arm "linear" SH-1000 Skiascope/Ophthalmoscope holder TC-1000 Trial lens cabinet CBS-1000 Control box stand

Electric Lift Tables

TT2C-800/TT2C-1000

The TT2C-800 and TT2C-1000 are vertically adjustable electric tables with two columns. Thanks to their size and stable stand they are ideal for placing two eye diagnostic devices. Also, the access for wheelchair users is quite convenient. The maximum load of the tables is 90 kg. Optional shelves for cables and accessories are available.

TTUD-1000

This model is designed for our ultrasound line. It is prepared with a drawer for storing the probes and a holder for wipes and cleaning liquids. The maximum load is 65 kg.

Specifications

	TT2C-800	TT2C-1000	TTUD-1000
DIMENSIONS			
Max. tabletop load	90 kg	90 kg	65 kg
Vertical movement range	300 mm	300 mm	302 mm
Tabletop dimensions	1000 x 500 mm	1240 x 550 mm	580 x 545 mm
Min. / max. tabletop height	608-908 mm	608-908 mm	702-1004 mm
Weight	33.6 kg	42 kg	34.6 kg

Excellent features

TT2C-800 / TT2C-1000

- + Tabletops:
TT2C-800: 1000 (W) x 500 (D) mm
TT2C-1000: 1240 (W) x 550 (D) mm
- + Vertical adjustment: 608 to 908 mm
- + Maximum load: 90 kg
- + Two-column design

TTUD-1000

- + Tabletop: 580 (W) x 545 (D) mm
- + Vertical adjustment: 702 to 1004 mm
- + Maximum load: 65 kg
- + Fits perfectly for ultrasound line



TTUD-1000



TT2C-800

TT2C-1000

Electric Lift Tables

TT-4060/TT-1060/TTVS-1000

Three vertically adjustable electric lift tables that allow you to use instruments that weigh up to 65 kg. For TT-1060, the optional shelf TTPR-1000 is available.

TT-4060



TT-1060



TTVS-1000



Excellent features

TT-4060/TT-1060/TTVS-1000

- + Tabletops:
 - TT-4060: 720 (W) x 460 (D) mm
 - TT-1060: 1060 (W) x 600 (D) mm
 - TTVS-1000: 1040 (W) x 553 (D) mm (v-shaped)
- + Vertical adjustment: 661 to 911 mm
- + Maximum load: 65 kg
- + Single column

Specifications

	TT-4060	TT-1060	TTVS-1000
DIMENSIONS			
Max. tabletop load	65 kg	65 kg	65 kg
Vertical movement range	250 mm	250 mm	250 mm
Tabletop dimensions	720 x 460 mm	1060 x 600 mm	1040 x 553 mm
Min. / max. tabletop height	661-911 mm	661-911 mm	661-911 mm
Weight	25.8 kg	30.8 kg	27.8 kg

Notes

You + eye.
We care.



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