DEVICE
OPHTHALMIC
TECHNOLOGY

TOPCON Healthcare
SEEING EYE HEALTH DIFFERENTLY

Chronos*

Optimise workflow and grow your practice
with guided binocular refraction.

It is time
to reinvent
refraction.

PIONEERING **OPHTHALMIC TECHNOLOGY**

I need to optimise workflow and increase patient convenience.

With Chronos, Now You Can.
It is time to reinvent refraction.

Not a real healthcare professional

Chronos offers RTC (Remote Tablet Control) for social distance protocal.**

**Applicable distance is subject to the device's communication performance and the communication environment.

Increase patient convenience, optimise workflow and grow your practice - without compromise.

Chronos offers binocular autorefraction, keratometry measurements and visual acuity with subjective testing. Chronos is a single space-saving instrument that optimises your workflow.

DELEGATE

- SightPilot™ is a guided refraction system that simplifies the exam and facilitates delegation.

GROW

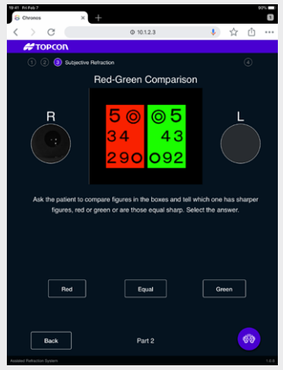
- Chronos offers the versatility critical for growing your practice.

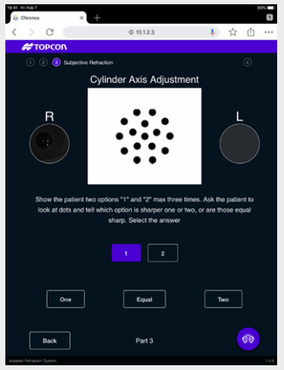
SAVE SPACE

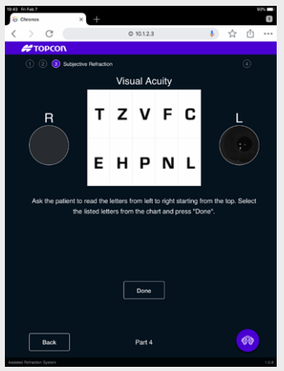
- Chronos combines binocular autorefraction and keratometry measurements with binocular subjective testing and visual acuity in a single instrument that occupies minimum space.
- Chronos reduces the number of conventional refraction lanes and additional refractometers needed.

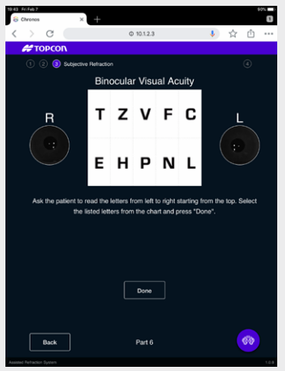
SightPilot™ is optimised for understanding and efficient workflow, facilitating delegation when required.

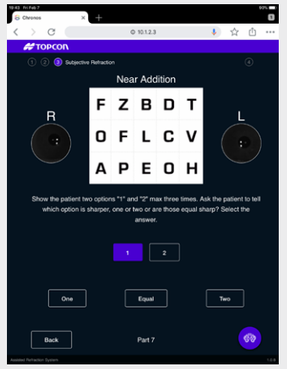
- SightPilot™ simplifies the user interface to provide a step-by-step guide through the refraction process.
- At each step, the operator is given instructions to proceed with the refraction, based on the patient's response.









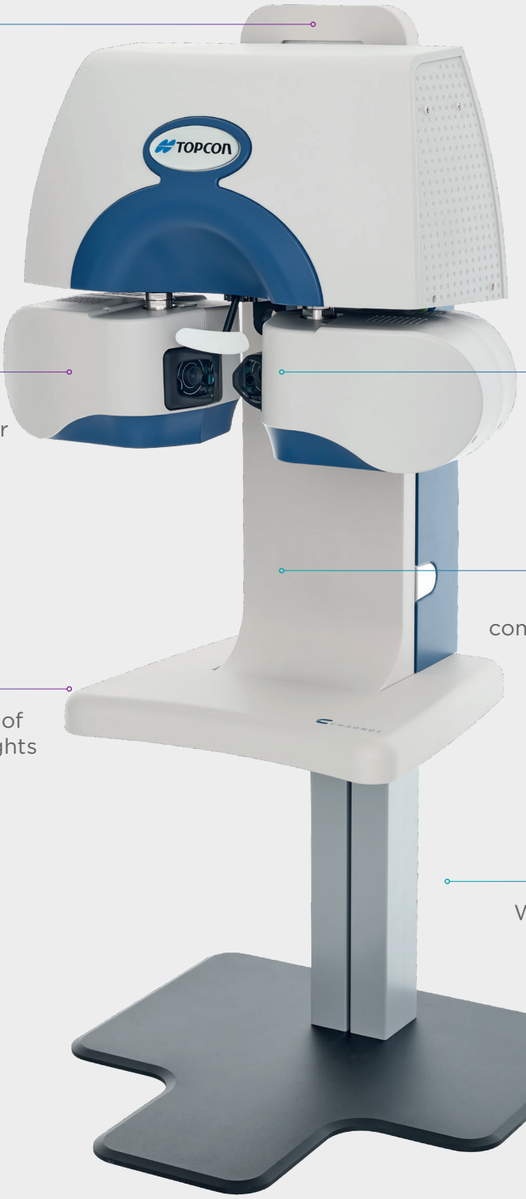


Chronos combines binocular autorefraction and keratometry measurements with binocular subjective testing and visual acuity in a single instrument that occupies a minimal amount of space and optimises workflow.

Accommodate patients
The table offers vertical positioning for Chronos at different heights.

Not a real patient

Chronos Specifications



SPECIFICATIONS & PERFORMANCE

FEATURE	SPECIFICATION	
Objective measurement		
Refraction measurement range	Spherical refractive power	-25 D – +22 D [1]
	Cylindrical refractive power	0 D – -10 D [1]
	Cylinder axial angle	1° – 180°
Corneal curvature measurement range	Corneal curvature radius	5.00 mm – 10.00 mm
	Corneal refractive power	67.50 D – 33.75 D (Conversion value when the corneal refractive ratio is 1.3375)
Minimum measurement unit	Spherical/cylindrical refractive power	0.12 D
	Cylinder axial angle	1°
	Corneal curvature radius	0.01 mm
	Corneal refractive power	0.12 D
Display of measured value	Displayed on the screen of the operation controller	
Minimum measurable pupil diameter	ϕ2.0 mm	
PD measurement range	50 mm – 80 mm	
Minimum PD measurement unit	0.5 mm	
Subjective measurement		
Refraction measurement range	Spherical power/ADD/ Cylindrical power These must meet all the conditions mentioned at the right [4]	-18.00 D ≤ Equivalent spherical power ≤ +18.00 D [2]
		-8.00 D ≤ Cylindrical power ≤ 0.00 D [3]
	Cylinder axial angle	1° – 180°
	Horizontal prism (One eye movable range)	±15.0 ⊿ [5]
	Vertical prism (One eye movable range)	±2.5
Minimum measurement unit	Spherical/ADD refractive power	0.25 D
	Cylindrical refractive power	0.25 D
	Cylinder axial angle	1°
	Prism refractive power	0.1 ⊿
Test distance	Far-/Near-point test distance can be set between 25 cm and 6.096 m	
Visual acuity measurement range [6]	0.05 – 1.6 decimal	
Charts	Visual acuity charts, spherical power correction charts, astigmatism correction charts and binocular function charts	
Background luminance	155±15 cd/m²	
Display of measured value	Displayed on the screen of the operation controller	
Record of measured value	Printing by thermal printer/external printer, data output	
Measuring head movement	Right-and-left direction	Inside -9.0 mm to Outside +12.5 mm
	Up-and-down direction	Down 15 mm to Up 15 mm
	Back-and-forth direction	Forward: 20 mm - Backward: 20 mm
Measuring head rotary angle	Convergence 17.5° to Divergence 8.5° (Eyeball torsion axis center)	
Power supply	AC100 - 240 V 50-60 Hz	
Power consumption	160 VA	
Dimensions and weight (main unit)	525 mm (H) × 722 mm (W) × 278 mm (D), 31.2 kg	

*Not available in all countries. Please check with your local distributor for availability in your country.

1. The dioptric powers are indicated with reference wavelength λe = 546.07 nm
2. The conversion value with "VD=12mm" is described here.
3. The conversion value with the pupil power (VD=-3mm) is described here.
4. The value described here is the maximum value. The measurement range is smaller according to the test distance setting for executing a test or the setting conditions of VD during measurement.
5. The value described here is the maximum value. The measurable range is smaller according to the combination of the patient's PD and the test distance.
6. 0.1 – 1.6 complies with ISO 10938. ETDRS chart using Landolt Ring (visual acuity 0.25 – 1.6) complies with ANSI Z80.21.

IMPORTANT

Subject to change in design and/or specifications without advanced notice. In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.
Medical device MDD Class Im. Manufacturer: Topcon Corporation.

TOPCON Healthcare
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CE 0123

CLASS 1 LASER PRODUCT (IEC60825-1:2007) PRODUIT LASER DE CLASSE 1 (CEI60825-1:2007)

TÜV SÜD EN ISO 13485 tuv-sud.com/ps-cert
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