iCare COMPASS

More than a standard perimeter

For better perception icare

iCare COMPASS
The evolution of standard automated perimetry

iCare COMPASS brings visual field analysis to the next level: the Fundus Automated Perimetry

iCare COMPASS Fundus Automated Perimetry overcomes Standard Automated Perimetry (SAP) limitations in visual field testing. iCare COMPASS is an automatic perimeter combined with an **active retinal tracker** and a scanning ophthalmoscope, providing eye movement artifact-free retinal sensitivity, as well as TrueColor Confocal images of the retina and fixation analysis.

Benefits at a glance

iCare COMPASS combines visual field tests, active retinal tracking for fixation loss correction and confocal TrueColor fundus imaging.

iCare COMPASS is easy to use thanks to its non-mydriatic and **trial lens free operation**, touch screen, auto-alignment and easy-to-clean design.

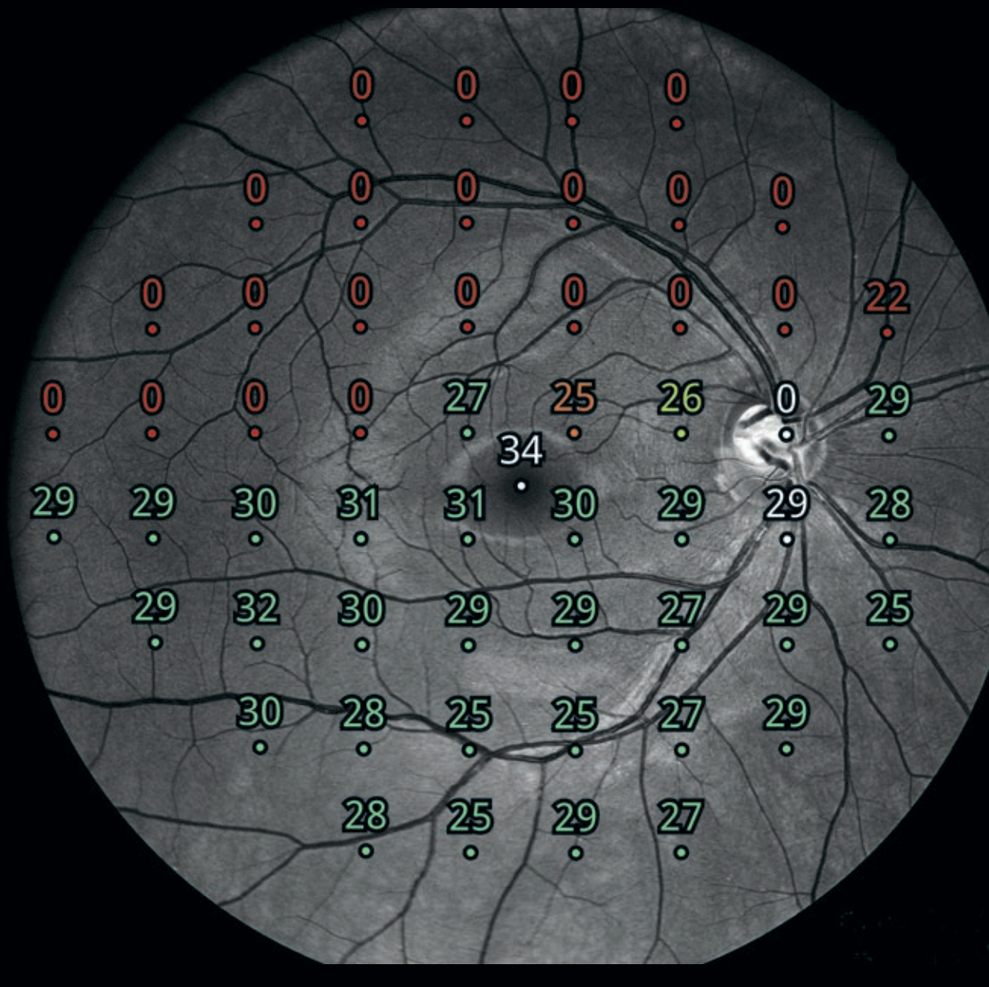
iCare COMPASS is patient friendly because the test is straight forward, quick, and can be stopped any time and started again without data loss.

All this helps save time and improve clinical performance.

Visual field test
Compatibility with SAP

As a perimeter, iCare COMPASS offers full compatibility with standard 24-2, 30-2 and 10-2 visual field testing containing age-matched databases of retinal sensitivity in normal subjects.

The iCare COMPASS suprathreshold testing is used to perform fast screening for visual field loss.



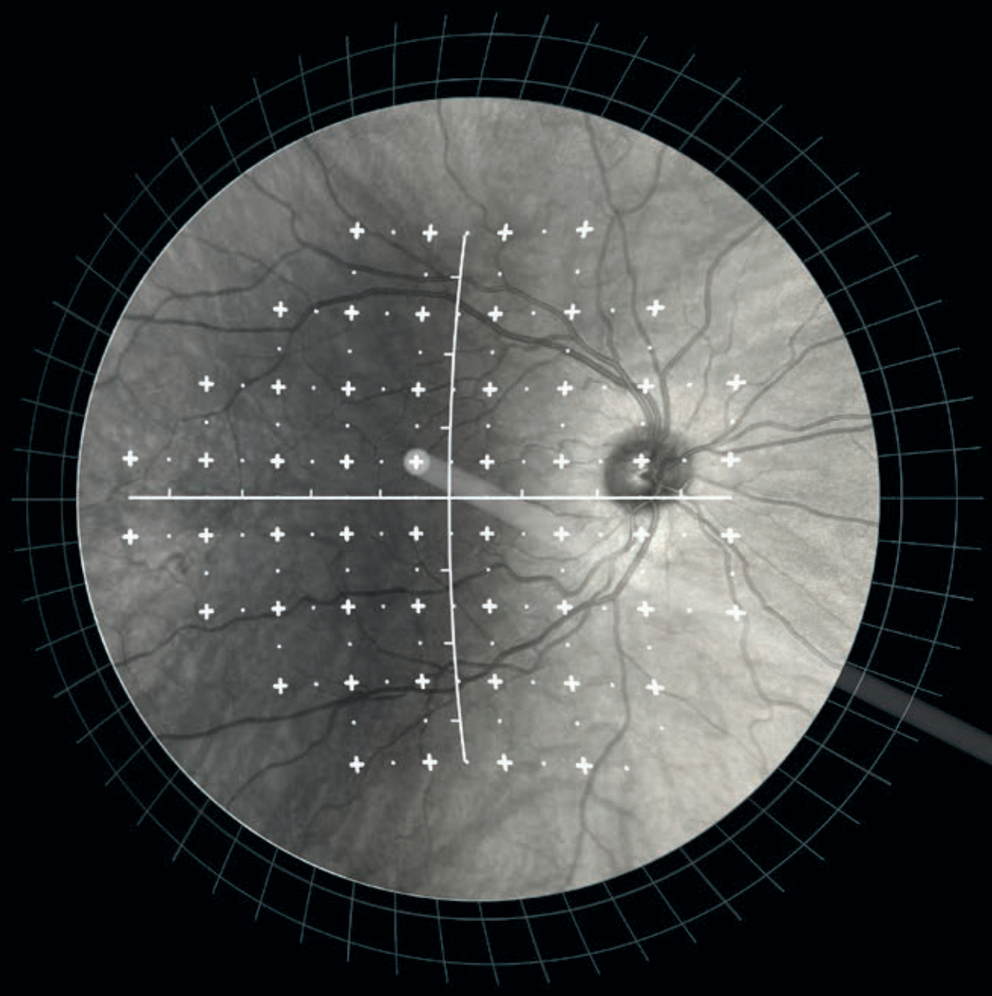
24-2 test performed with iCare COMPASS.

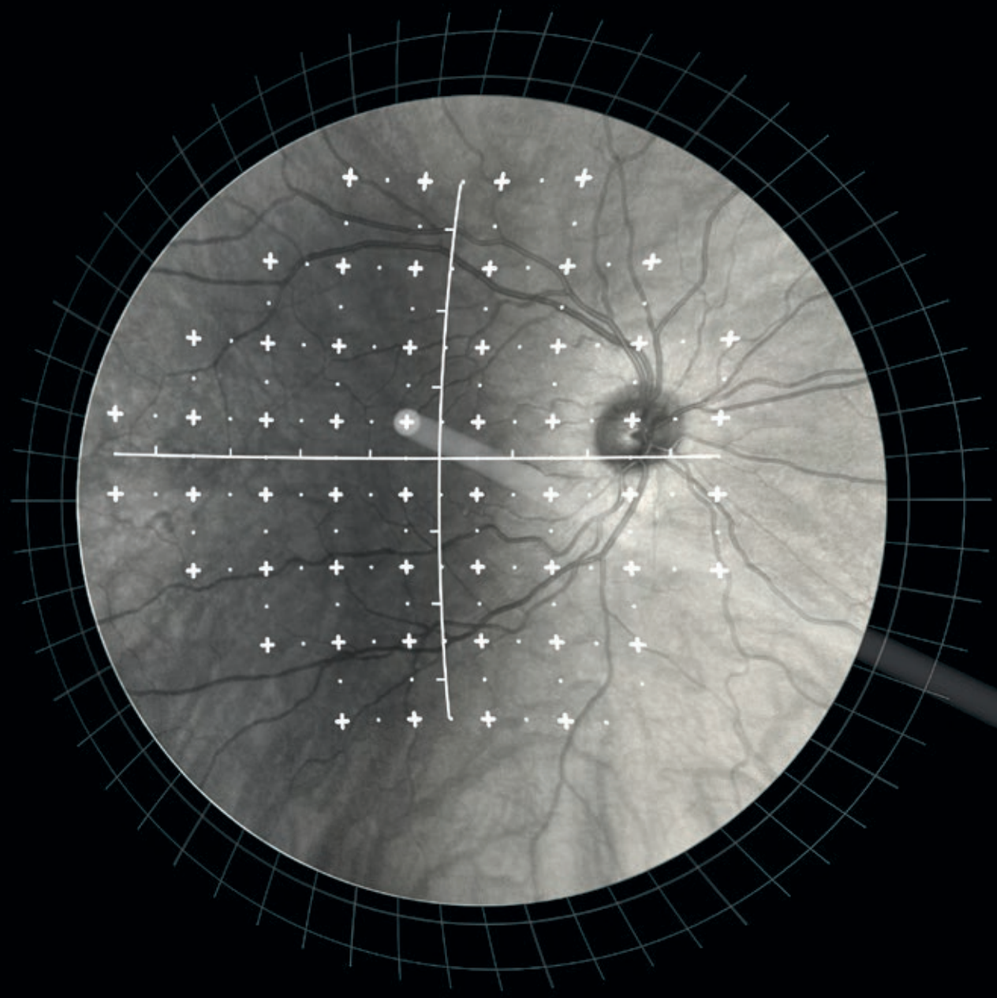
Active Retinal Tracking

Increased reliability in case of fixation losses

Retinal tracking is at the heart of Fundus Automated Perimetry.

Continuous, automated, tracking of eye movements yields to **active compensation for fixation losses**, with perimetric stimuli being automatically repositioned prior to and during projection based on the current eye position.



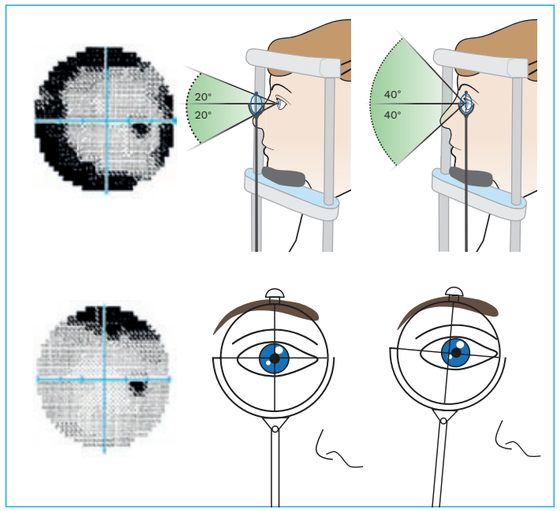


This mechanism is critical to ensure accurate correlation between function (i.e. retinal threshold values) and structure (fundus image) as well as to ensure the reliability of visual field tests measured over time.

In absence of this mechanism, any shift in eye position occurring at the time of stimuli projection would easily produce artifacts in the visual field results, with inaccurate sensitivity values and unreliable visual field retest results being reported.

Easy to use
No need for trial lenses

Traditional SAP is performed through refractive correction with trial lenses, which increases examination time and may induce artifacts. iCare COMPASS has no trial lenses at all but is equipped with an automatic refractive correction system (auto-focus), decreasing the examination time and increasing ease of use.



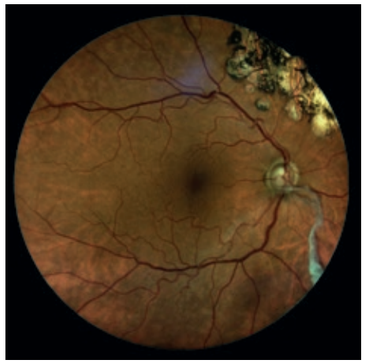
The trial lens of a SAP device may alter the test results:

- if the lens is too close, it can distract the patient by rubbing the eyelashes
- if the lens is too far, the edge of the lens can obscure the field of vision causing an absolute ring scotoma
- if the lens is decentralized, it can cause a partial absolute defect
- if a face mask is used, the trial lens may become foggy.

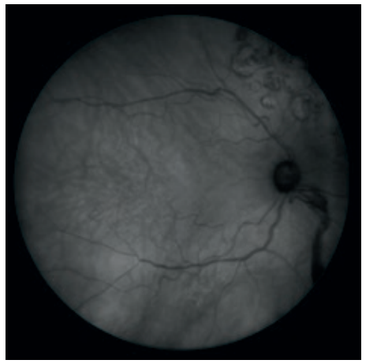
A lateral view of iCare COMPASS that has no trial lens.

TrueColor Confocal Imaging
Enhancing diagnostic and prognostic capabilities in glaucoma management

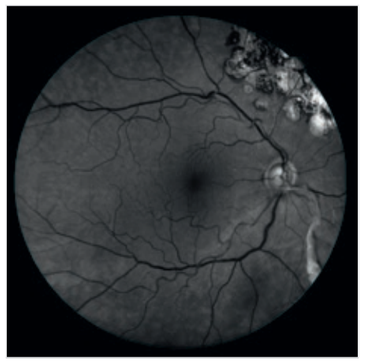
Evaluation of the fundus aids in a thorough glaucoma assessment.
For the first time in a visual field test, iCare COMPASS provides 60° confocal images of the retina in different modalities: TrueColor, infrared and Red-free.



TrueColor Image



Infrared image



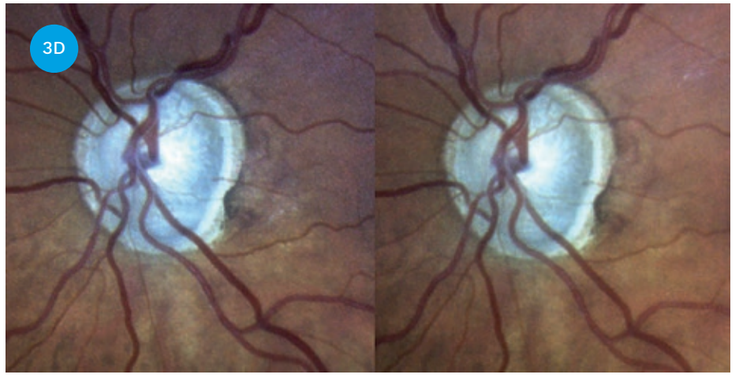
Red-free image

Stereo Viewer technology
The best 3D visualization of the ONH

Glaucoma diagnosis, management and research, require complex assessments of the optic disc. 3D images of the optic nerve head (ONH) are essential tools in such evaluations.

The unique 3D Stereo Viewer technology of COMPASS automatically captures two separate photos of the nasal field, at different angles and different focal planes (bifocal), creating outstanding 3D perception of the disc.

ONH stereo visualization:
- Automatic
- Ultra High resolution
- Reliable

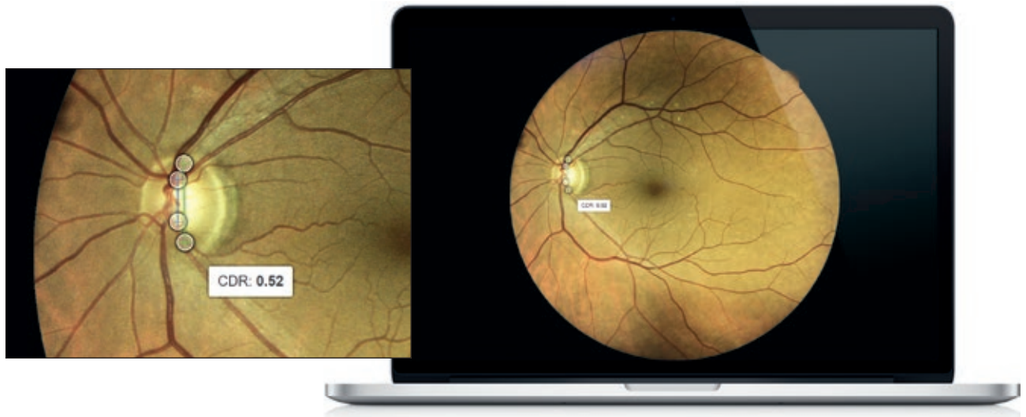


Remote Viewer software
Seamless connectivity without the need of a dedicated application

iCare COMPASS offers embedded capabilities for network connectivity, for both remote **data review** and data backup. The iCare COMPASS Remote Viewer is a browser-based software that allows for reviewing from any network computer on the same local area network (LAN), with password protection.

The Remote Viewer provides image comparison tools, anatomic measurements, post-processing tools and more.

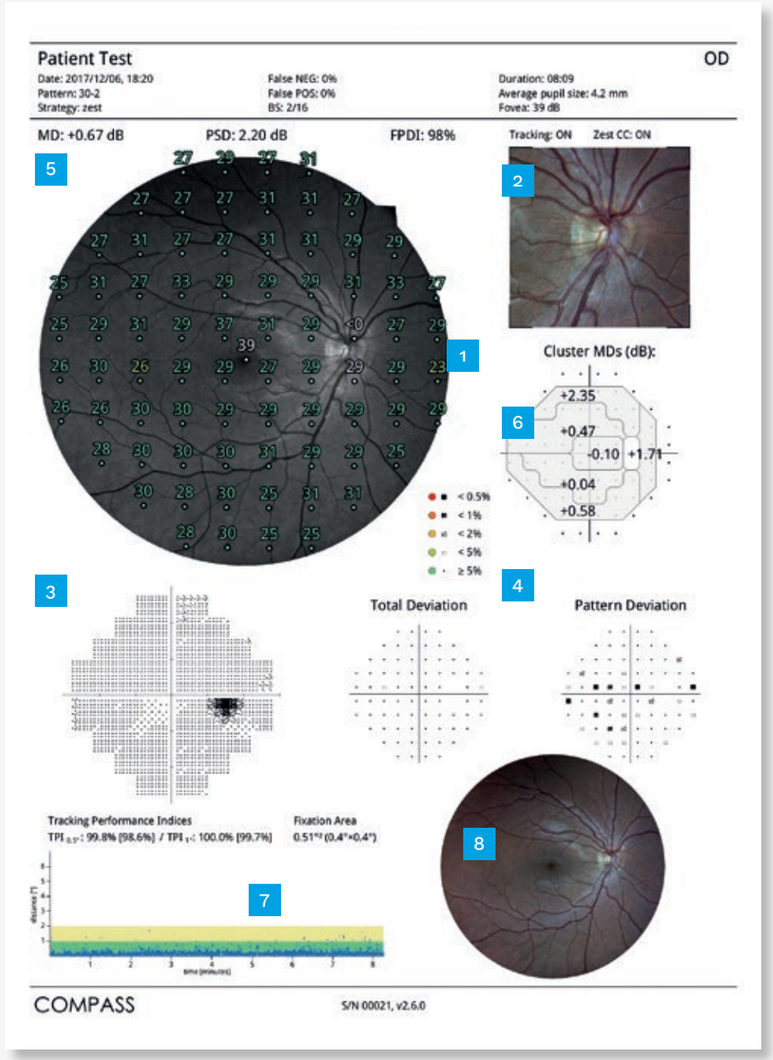
- Images taken at different times can be registered and displayed as rapidly alternating to facilitate detection of morphologic changes over time
- **Cup to disc calculation** – ratios can be measured and stored



iCare COMPASS printouts

Exam report

1. Fundus Automated Perimetry (dB) over Red-free image
2. Color image of ONH
3. Standard VF map
4. Deviation maps
5. Mean Deviation, Pattern Standard Deviation & Fundus Perimetry Deviation Index
6. Mean Deviation Cluster
7. Fixation plot
8. Color Retinal Image*

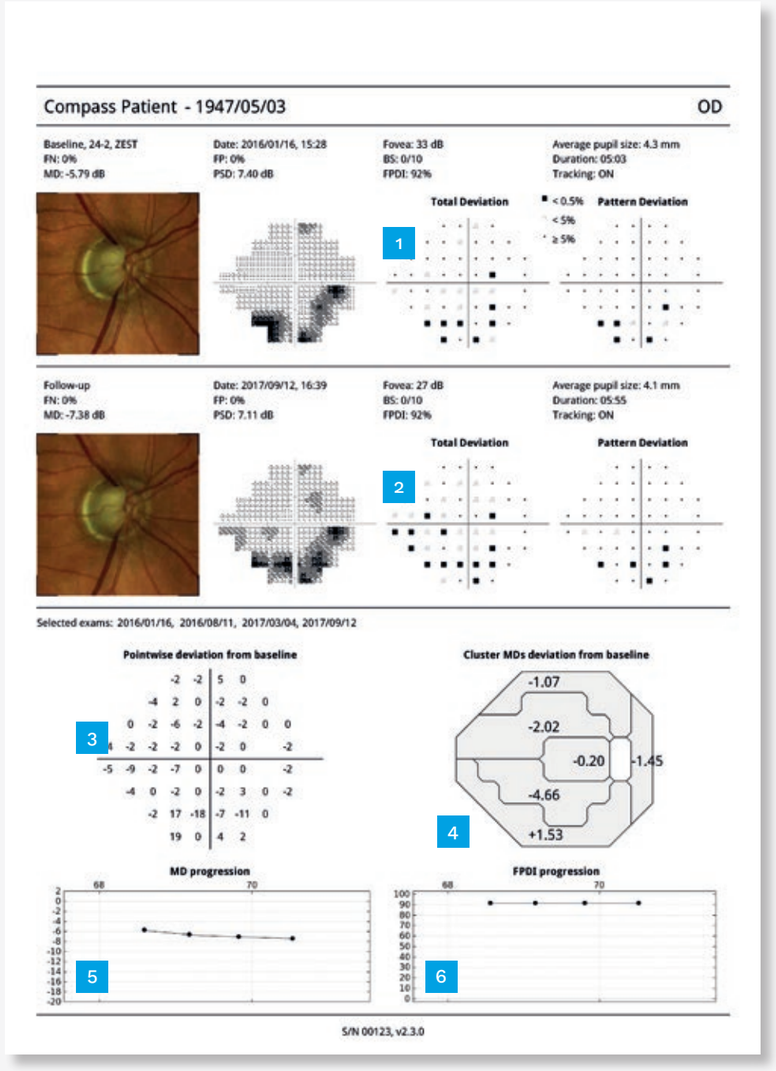


* Glaucoma Staging System 2 available outside of the USA.

iCare COMPASS printouts

Progression report

1. Baseline test
2. Follow-up test
3. Pointwise differential map
4. Cluster differential map
5. Mean Deviation progression
6. Fundus Perimetry Deviation Index progression



Technical data

iCare COMPASS	
Class and type of applied part	1, B (according to IEC 60601-1)
Fundus Automated Perimetry	Projection field: 30° (radius) Background luminance: 31.4 asb Maximum luminance: 10000 asb Dynamic range: 0 - 50 dB Stimulus size: Goldmann III Stimulus duration: 200 ms Test strategies: ZEST, 4-2 Threshold tests: 24-2, 30-2, 10-2 Suprathreshold testing Quick Suprathreshold testing Foveal threshold testing Fixation control: 25 Hz automated retinal tracking Automatic pupil size measurement
Fundus Imaging	Field of view: 60° (diameter) Bi-focal Stereo Image of the ONH Sensor resolution: 5 Mpixel (2592x1944) Light source: infrared (825-870 nm) and white LED (440-650 nm) Imaging modalities: color, infrared, red-free Resolution: 17 µm
Other features	Automatic operation: auto-alignment, auto-focus, auto-retinal tracking, auto-pupil tracking, auto-exposure, auto-capture Non-mydriatic operation: minimum pupil size 3 mm Working distance: 28 mm Auto-focusing adjustment range: -12D to +15D Tablet operated, with multi-touch, color display Ethernet connection DICOM support, modality worklist Hard drive: SSD, 240 GB
Remote Viewer	Manual cup to disc calculation (on color picture) Flickering
Dimensions	Weight: 25 Kg / 55 lbs Size (WxDxH): 360 mm x 620 mm x 590 mm / 14.2” x 24.1” x 23.2”
Electrical requirements	Rated voltage: 100-240 VAC, 50-60 Hz Power consumption: 80 W

iCare. For better perception.

iCare is a trusted partner in ophthalmic diagnostics, offering physicians fast, easy-to-use, and reliable tools for diagnosis of glaucoma, diabetic retinopathy, and macular degeneration (AMD). Our product assortment includes automated TrueColor imaging devices, perimeters and handheld rebound tonometers.

We believe that ophthalmic care must be accessible, effortless, and reliable, and we aim at establishing the next level of eye care.

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