

iCare COMPASS



**Setting the platinum
standard in perimetry**

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 (FAP)

The COMPASS Fundus Automated Perimetry (FAP) overcomes the Standard Automated Perimetry (SAP) limitations setting a new paradigm in visual field testing.

iCare COMPASS is an automatic perimeter combined with an active retinal tracker and a scanning ophthalmoscope that provides eye movement artefact-free retinal threshold sensitivity as well as TrueColor confocal images of the retina and fixation analysis.



Higher accuracy > Reduced uncertainty

COMPASS measures sensitivity at specific retinal locations with high topographic accuracy thanks to the retinal tracking which compensates eye movements during visual field examination.

Function-Structure > Neural loss equals visual field loss

COMPASS overimposes the threshold map over a 60° image of the fundus, allowing simultaneous assessment of retinal function and structure.

TrueColor Confocal Imaging > The best assessment of the ONH

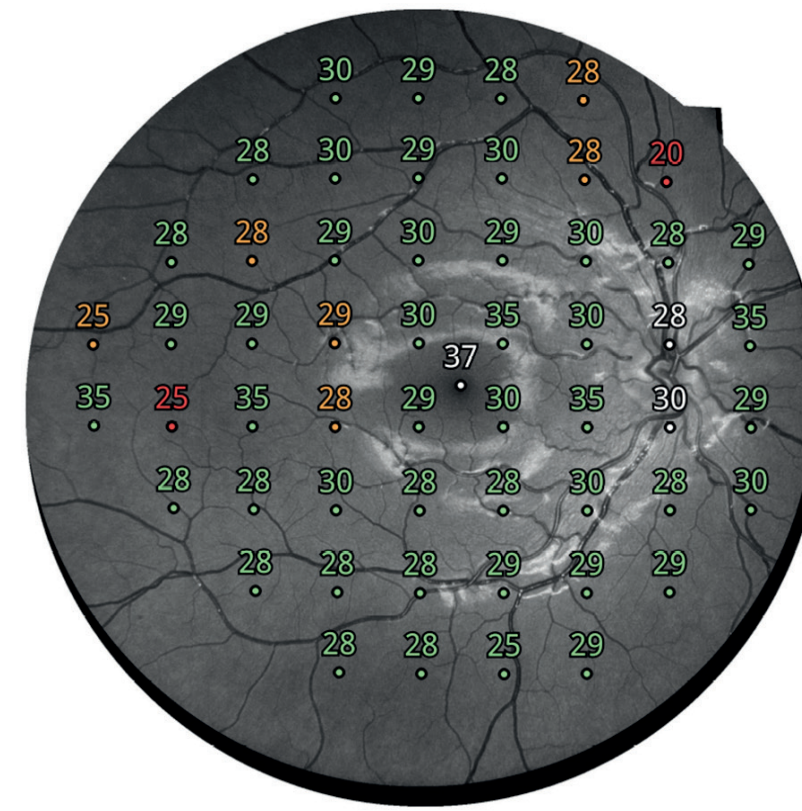
COMPASS offers the advantage of a true color confocal imaging system, allowing the visualization of the retina in real color, with outstanding details of the Optic Nerve Head.

Automated refraction correction > Improved patient workflow

COMPASS facilitates operator activities and reduces wait times thanks to the autocorrection of refractive errors eliminating the need for trial lenses.

Clear & Comprehensive printout > The perfect educational tool

Today's patients are more involved in the diagnostic and treatment process. The COMPASS comprehensive report allows easier explanation of visual field function.



Visual field test

Compatibility with SAP

As a perimeter, 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 COMPASS suprathreshold testing is used to perform fast screening for visual field loss.

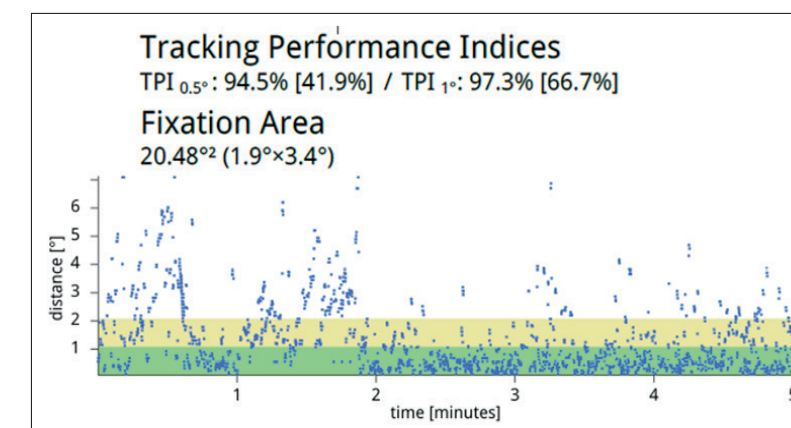
24-2 test performed with Compass

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 of fixation losses, with perimetric stimuli being automatically re-positioned 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).

In absence of this mechanism, any shift in eye position occurring at the time of stimuli projection would easily produce artifacts in VF results, with an inaccurate sensitivity being reported.

Plot of patient fixation over the exam time

Easy to use
No need for trial lenses with
Automatic Refraction Correction

Traditional SAP is performed through refractive correction with trial lenses, which increases examination time and may induce artifacts. COMPASS is equipped with an automatic refractive correction system, improving patient flow.



Ergonomic and motorized chinrest design.



Touch screen interface via high resolution integrated tablet that can be moved to keep a clearance between the operator and the patient.



Patient push-button designed for improved ergonomics.



All In-one design (no external PC) with 1 Ethernet and 3 USB Ports.

Hygienic design

The design of COMPASS offers an additional benefit of being easy to clean between for instance sniffing and coughing patients due to the smooth, narrow and convex front of the device (no bowl and trial lens assembly). All COMPASS surfaces can be disinfected with an alcohol wipe.

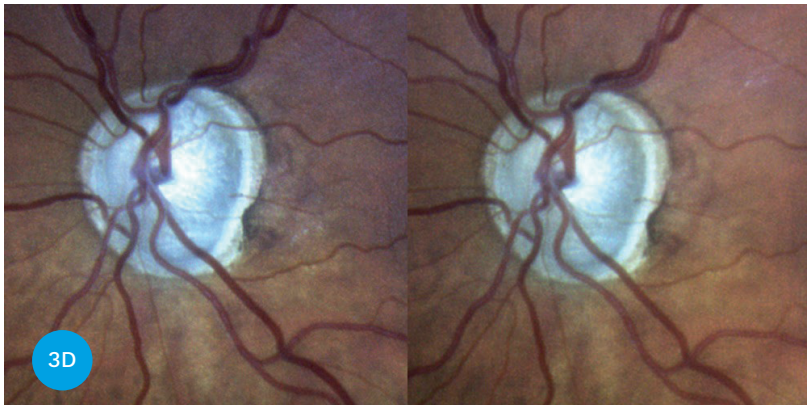
Bifocal Stereo Image
The best 3D visualization of the ONH

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 View technology of COMPASS captures automatically 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: as never seen before!

- Automatic
- Ultra High resolution
- Reliable

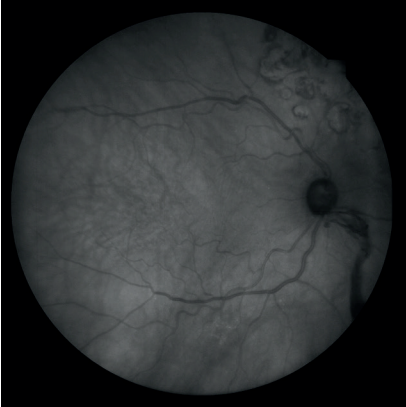


TrueColor Confocal Imaging
Enhancing diagnostic and prognostic capabilities
in glaucoma management

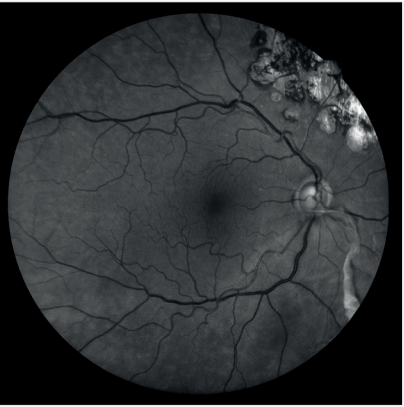
Evaluation of the fundus is crucial in a thorough glaucoma assessment. For the first time in a visual field test, COMPASS provides 60° confocal images of the retina in different modalities: TrueColor, Infrared and Red-free.



TrueColor Image



Infrared image

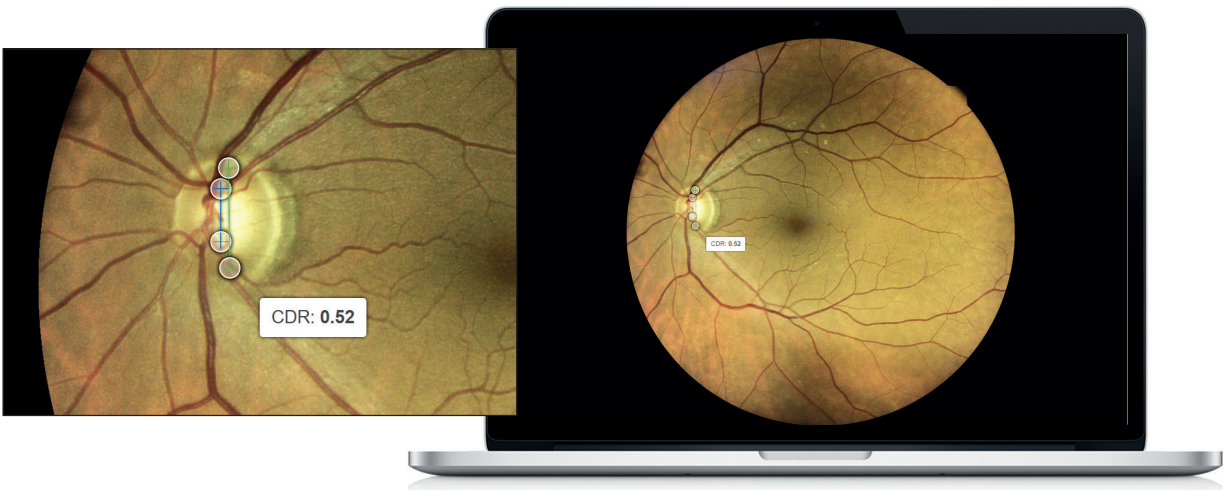


Red-free image

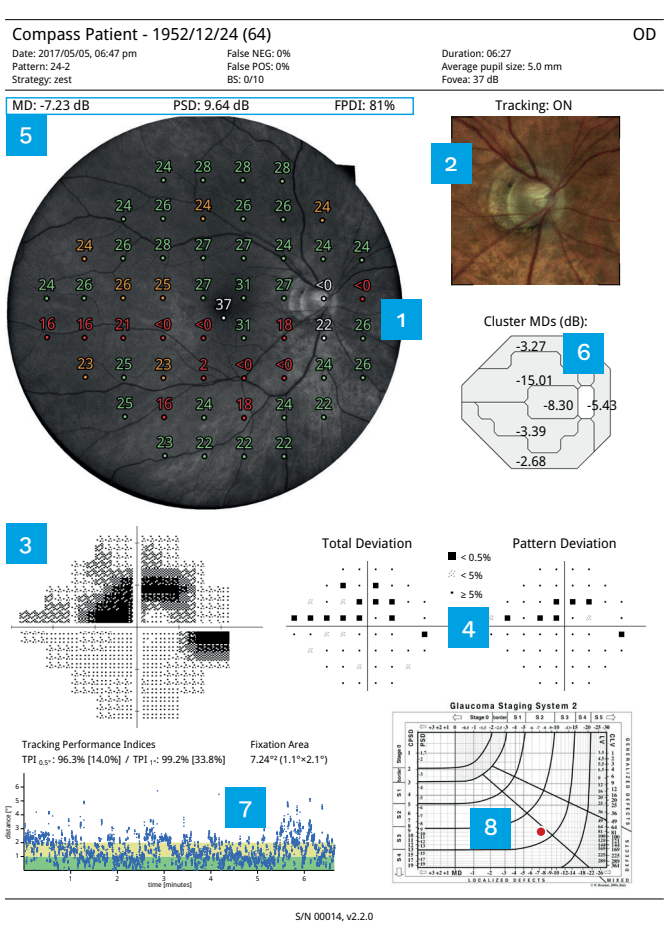
Remote viewing software
Seamless connectivity without the need of a dedicated application

COMPASS offers embedded capabilities for network connectivity, for both remote data review and data backup. The 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

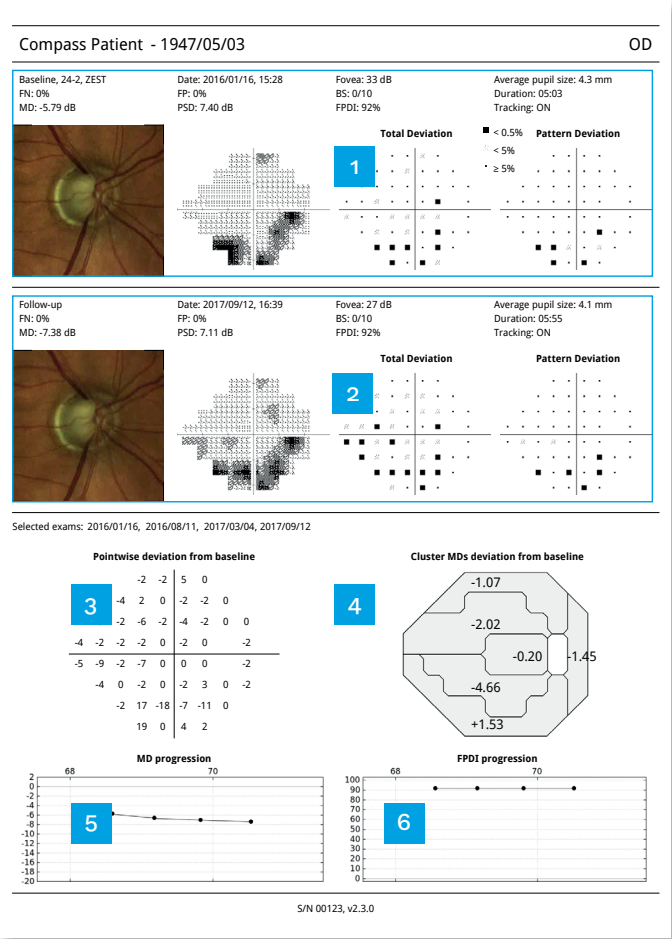


Progression Report

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

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 Glaucoma Staging Classificator



Benefits at a glance

COMPASS combines visual field tests, active Retinal Tracking for fixation loss correction and confocal TrueColor fundus imaging.

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

COMPASS is patient friendly because the test is straight forward, relatively fast, and can be discontinued any time and continued again without data loss.

All this results in time savings and improved clinical performance.

Technical specifications*

Class and type of applied part

1, B (according to EN 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 (26")
- Stimulus duration: 200 ms
- Test strategies: ZEST, 4-2
- Threshold tests: 30-2, 24-2, 10-2
- 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 disk: SSD, 256 GB

Remote Viewer:

- Manual cup to disc calculation (on color picture)
- Flickering

Dimensions:

- Weight: 25 Kg
- Size (WxDxH): 360mm x 620mm x 590mm

Electrical requirements:

- Power: 100-240 VAC, 50-60 Hz
- Consumption: 80 W

* Specifications are subject to change without notice for improvement.

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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