




Gonioscope
GS-1



THE ART OF EYE CARE



The Innovation You Have Been Waiting For

Automated gonioscopy
with 360° color imaging

For over a century, specialists have performed manual gonioscopy. Now, NIDEK is pleased to announce the first automated gonioscopy device.

The GS-1 represents a new chapter in the history of ophthalmology. This innovation will allow more clinicians to reliably perform gonioscopy.

Clinical cases



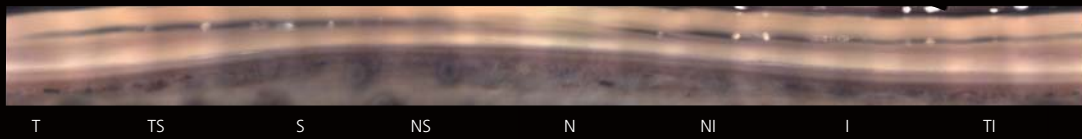
Drainage system (right eye) *1



Pigmented trabecular meshwork *1



Angle closure *1



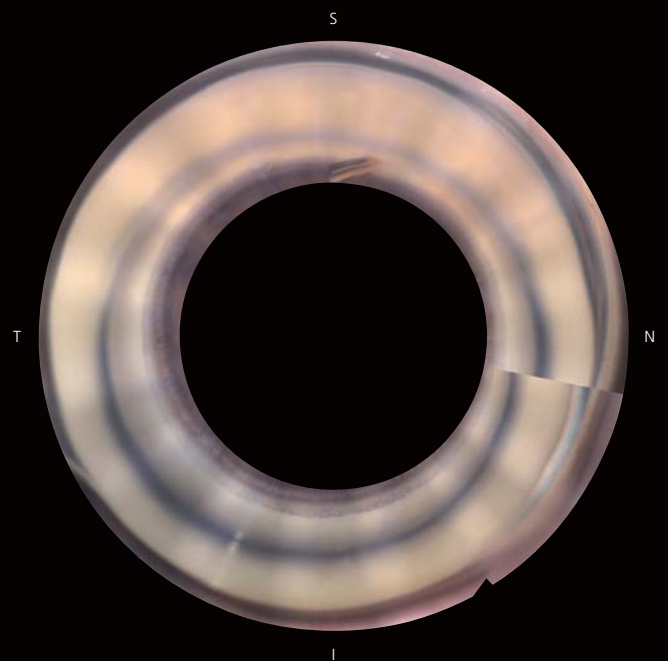
Open angle (left eye)*1



MIGS device *2



Phakic IOL implantation *2



MIGS device (right eye) *1

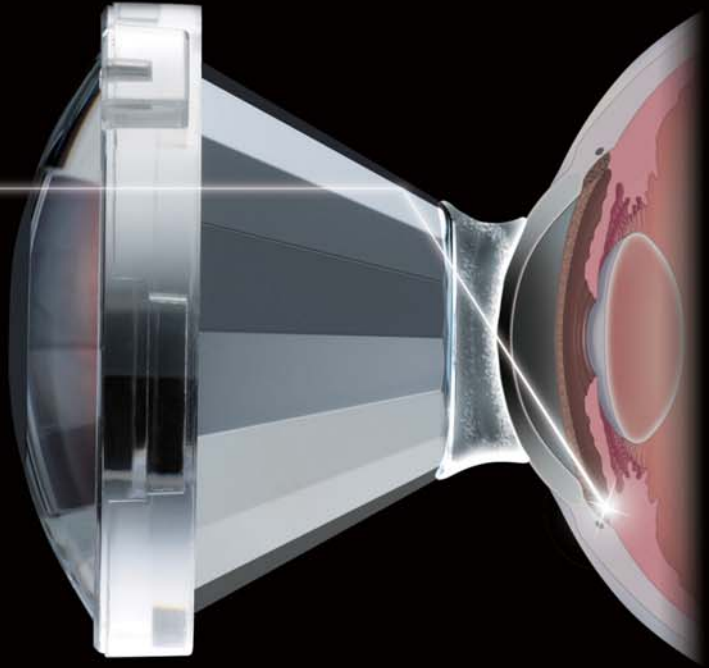
*1 Images courtesy of Prof. C. E. TRAVERSO, MD, Clinica Oculistica, Di.N.O.G.M.I., University of Genova - Ospedale Policlinico S. Martino, Italy

*2 Images courtesy of Assist. Prof. Luis Abegão Pinto, MD, PhD, University of Lisbon, Portugal

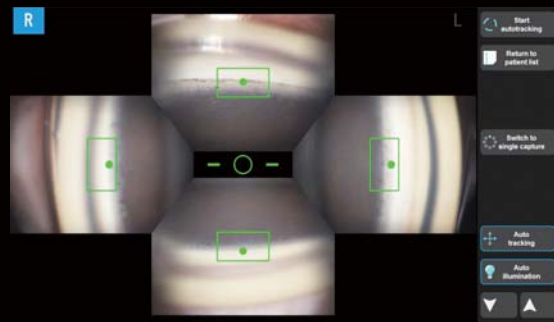
Sophisticated lens design for 360° angle imaging

The GS-1 incorporates a unique one-of-a-kind multimirror prism lens designed specifically for this system. Sixteen surfaces capture 360 degrees in one smooth measurement sequence.

The NIDEK multimirror prism lens was developed by optimizing each surface for the perfect angle. (The patent for 360-degree angle imaging with multimirror prism lens is pending.)



Intelligent "Angle Detection"



Automated Angle Detection provides guidance for capturing the iridocorneal angle.

Through diligent research, NIDEK developed Angle Detection that can recognize angles regardless of eye color.

Introducing innovative "Stitching"

The GS-1 composes linear and circular images of iridocorneal angle structures when the entire 360 degrees are captured.



Linear Stitching



Circular Stitching

A picture is worth a thousand words

Focus depth

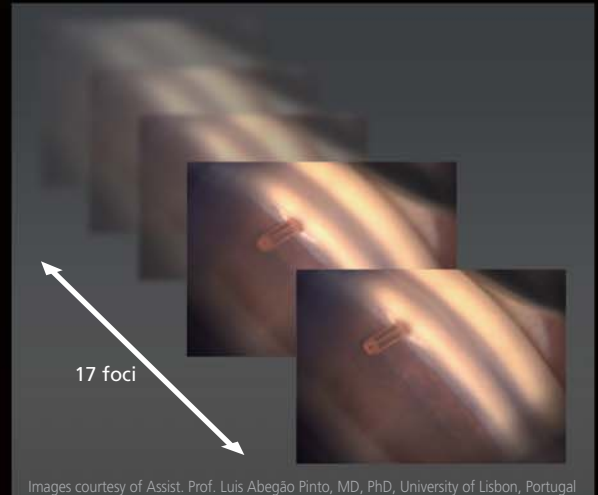
Each area is automatically captured in 17 different foci, enabling versatile approaches to the angle. (Up to 15 images per area can be saved.)

Resolution

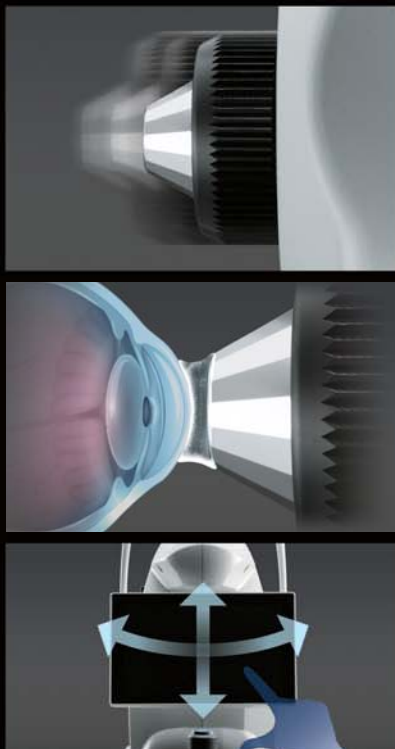
High resolution images allow detailed observation of the angle including PAS (peripheral anterior synechia), pigmentation, neovascular vessels, and MIGS devices.

Data storage and report export

Data saving without an external PC connection enhances clinical efficiency and patient management. Different from classic gonioscopy, diagnosis can be performed based on the acquired images rather than at the time of assessment. Images can be easily shared at conferences and used for patient education.



Images courtesy of Assist. Prof. Luis Abegão Pinto, MD, PhD, University of Lisbon, Portugal



Enhanced features to improve your practice

Safety mechanism

A slideback mechanism retracts the prism lens to ensure only adequate pressure is exerted on the patients eye.

GEL immersion examination

This system uses gel coupling to ensure patient comfort. (The multimirror prism lens is not intended to touch the cornea.)

User friendly interface

The 9.0-inch color touch screen allows tablet-like, intuitive operation such as pinch-to-zoom and swipe. This screen is tiltable both horizontally and vertically for easy access to the eyelids.

Gonioscope GS-1 Specifications

ACA image capture	
Capturing area	Approximately 2.36 mm (circumference direction) x 2 mm (diameter direction)
Working distance	1.5 mm
Light source	White LED
Stitching	Circular, linear
Capture mode	Single capture Full capture: 272 images (17 foci x 16 areas)
Auto tracking	X-Y directions
Auto shot	Available
Display	9.0-inch (WXGA) color LCD touch screen
Storage	Built-in SSD
Interface	USB, LAN
Output format	JPEG, PDF, PNG
Power supply	AC 100 to 240 V 50/60 Hz
Power consumption	100 VA
Dimension/Mass	280 (W) x 504 (D) x 460 (H) mm / 15 kg 11.0 (W) x 19.8 (D) x 18.1 (H)" / 33 lbs.
Optional accessories	External fixation lamp, head belt, barcode reader, shielded LAN cable
Storage temperature	-10 to 55 °C (14 to 131 °F)

Multimirror Prism Specifications

Facets	16 surfaces
Disinfection method	Glutaral agent (Glutaraldehyde) (Up to 100 exams)
Sterilization method	EOG (Up to 30 exams)

GS Gel Specifications

Characteristics	Colorless and transparent, viscoelastic gel, water-soluble polymer, including an antiseptic agent, up to 30 exams per tube
Storage temperature	25 °C or lower (77 °F or lower) (non-freezing)



Product/Model name: GONIOSCOPE GS-1

Brochure and listed features of the device are intended for non-US practitioners.

Specifications may vary depending on circumstances in each country.

Specifications and design are subject to change without notice.



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