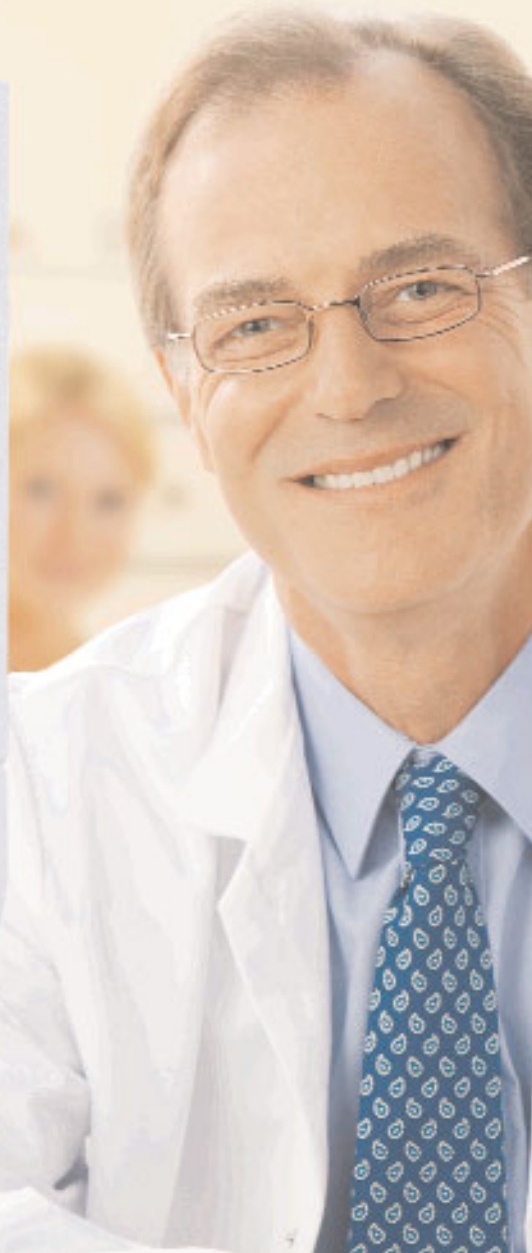
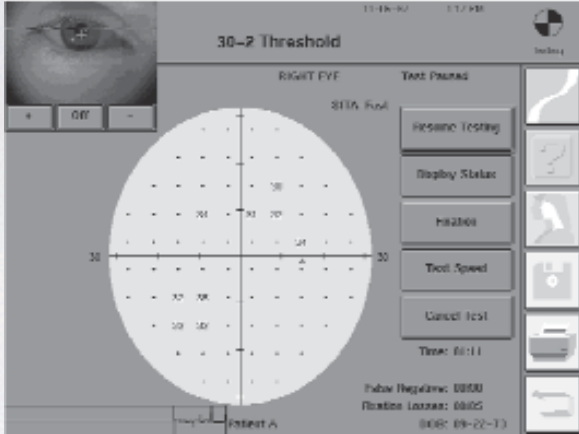


Humphrey® HFA II-i Field Analyzer. Precision and less time.



Leading-edge perimetry.

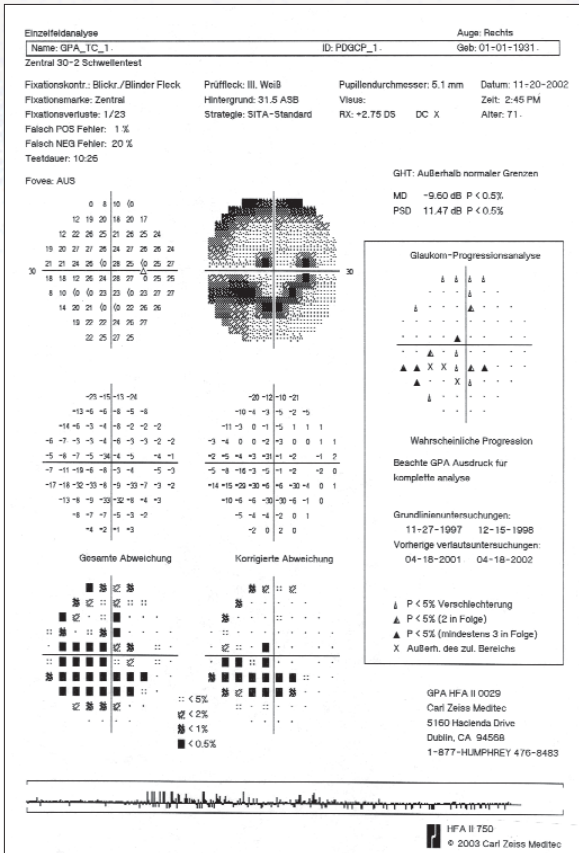


Monitoring during an examination

Exactly as Goldmann specified

The HFA II-i Field Analyzer meets all requirements for state-of-the-art static and kinetic perimetry. The patented Goldmann bowl, which is aspherically curved outside the 30° central area, allows a space-saving, compact design. The distance of the patient's eye from the center of the bowl surface measures 30 cm exactly and complies with the Goldmann standard. All Goldmann stimulus sizes, from I to V, can be set with custom intensities.

Fixation monitoring is performed in accordance with the Heijl-Krakau technique on a screen and, depending on the model, using gaze tracking and/or head vertex tracking.



Overview printout with glaucoma-progression analysis

Vast examination potential

All models of the HFA II-i Field Analyzer offer excellent examination potential. Both fast threshold tests and screening tests with clearly defined checkpoin grids are possible.

Static perimetry permits:

- Threshold tests for the recognition of flat scotomas
- Time-saving screening tests with two-zone, three-zone and quantify-defect strategies
- Driver's license certificates
- User-defined tests

Kinetic perimetry enables:

- Determination of outer limits to 80°
- Measurement of scotomas, blind spot; neurological tests
- Free meridian selection with constant stimulus motion between 1°/sec. and 9°/sec. in any direction
- Manual testing

Time-saving strategies.

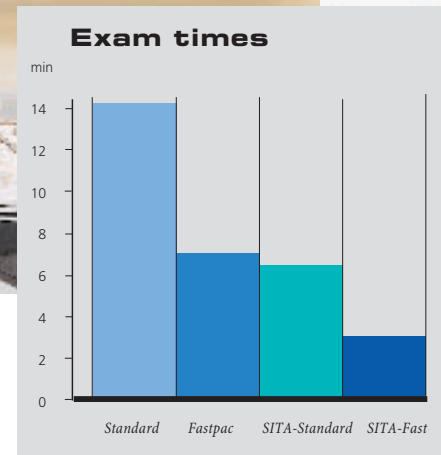


To overcome the internationally recognized technique of full-threshold perimetry that can be very time-consuming and require a high-degree of patient cooperation, the HFA II-*i* provides advanced, fast-threshold strategies, including:

- S.I.T.A.
- S.I.T.A. fast

Interactive efficient algorithm for short exam times

The goal of reducing exam times without impairing the accuracy of the measured results has been achieved with the new S.I.T.A. algorithm. S.I.T.A. reduces the examination time required with the standard 30-2 algorithm by one half with no loss of reproducibility or sensitivity to glaucomatous loss. With an examination time of as little as three minutes, the S.I.T.A. Fast strategy cuts exam time further, as much as one half of the S.I.T.A. test time.



S.I.T.A. is the most sophisticated threshold testing strategy that is performed interactively with the patient. An individual profile (reaction time, etc.) is obtained for each patient, reducing the error rate and providing high-quality results despite shorter exam times.

The efficiency of the S.I.T.A. algorithm is partly attributable to its ability to present the majority of stimuli close to the 50% frequency of the visual threshold and to correlate them with patient reactions.

At the end of the examination, the answers from all stimulus locations are reviewed and the reliability of the results improved.

Perfection in action - early detection of glaucoma.

The early detection of glaucoma with the fast strategy for blue- yellow perimetry - SITA SWAP™

The new SITA SWAP™ software reduces the examination time to a third of standard blue-yellow examinations and takes an average of only 3-6 minutes. SITA SWAP features significantly greater dynamics as well as lower interindividual variance.⁽¹⁾

The results of SWAP correlate with the loss of retinal nerve fibers caused by glaucoma.⁽²⁾

Blue-yellow perimetry measures the blue-yellow ganglion cell function. The yellow background desensitizes the red and green cones. The blue stimulus with 440 nm coincides with the maximum sensitivity of the blue cones. This technique has proven to be particularly successful for

- ocular hypertension patients
- glaucoma suspects
- detecting early visual field loss.

Simplified analysis of significant changes in the glaucomatous visual fields using glaucoma pro- gression analysis software (GPA)

The glaucoma progression analysis software takes the random variability of visual field analyses into consideration and identifies progressive visual field loss that exceeds the normal level of test/retest variability. The GPA software is compatible with both Full Threshold and SITA strategies: it is designed for use with SITA Standard and SITA Fast exams, but not SITA SWAP exams. Full Threshold exams may also be used as baseline tests for GPA. The use of simple symbols permits a very simplified interpretation of the results.



SWAP Perimetry with HFA II-i

Perfection down to the last detail

With its award-winning, space-saving design, the HFA II-i field analyzer is the perfect solution for any office and offers a large number of convincing benefits:

- Exams are possible in dim out room lighting thanks to the automatic calibration of the background light intensity to 31.5 asb.
- A touch screen with customizable on-screen menus makes the instrument easy to operate and saves valuable time (optionally also via computer keyboard).
- Wheelchair accessible and award-winning ergonomic design allow maximum comfort for all body types.
- An RS-232-C interface and video port are provided for connection to a computer.

The instrument is configured for connection to an office printer, laser printer (optional).

⁽¹⁾ Bengtsson B, Heijl A., "Normal intersubject threshold variability and normal limits of the SITA SWAP and full threshold SWAP perimetric programs." *Invest Ophthalmol Vis Sci.* 2003 Nov.;44(11):5029-34.

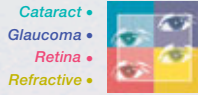
⁽²⁾ Sanchez-Galeana CA, Bowd C, Zangwill LM, Sample PA, Weinreb RN. "Short-wavelength automated perimetry results are correlated with optical coherence tomography retinal nerve fiber layer thickness measurements in glaucomatous eyes" *Ophthalmology.* 2004 Oct.;111(10):1866-72.

Technical Data.

		Model 720i	Model 740i	Model 745i	Model 750i
Threshold Test					
Central Field Test Patterns	10-2, 24-2, 30-2, Macula*	x	x	x	x
Peripheral Field Test Patterns	60-4, Nasal Step*	x	x	x	x
Threshold Test Strategies	SITA Standard	x	x	x	x
	SITA Fast	x	x	x	x
	Full Threshold	x	x	x	x
	FastPac™	x	x	x	x
Screening Test					
Central Field Test Patterns	C-40, C-64, C-76, C-80, C-Armaly*	x	x	x	x
Peripheral Field Test Patterns	P-60, FF-81, FF-120, FF-135, FF-246, FF-Armaly, Nasal Step*	x	x	x	x
Screening Test Strategies	Two Zone	x	x	x	x
	Three Zone	x	x	x	x
	Quantify Defects	x	x	x	x
Screening Test Modes	Age Corrected, Suprathreshold	x	x	x	x
Specialty Test					
Esterman Monocular		x	x	x	x
Esterman Binocular		x	x	x	x
Superior 36		x	x	x	x
Superior 64		x	x	x	x
Kinetic Testing			x	x	x
Custom Testing			x	x	x
Stimulus/Background Color	White on White	x	x	x	x
	Red or Blue on White		x	x	x
	Blue on Yellow (Short Wavelength Automated Perimetry)		Opt.	x	x
General Testing Features	Goldmann Stimulus Sizes	III	I-V	I-V	I-V
	Foval Threshold Testing		x	x	x
	Automatic Pupil Measurement				x
User Defined Test Storage		x	x	x	x
User Features					
Fixation Monitoring	Heijl / Krakau Blind Spot Monitor	x	x	x	x
	Video Eye Monitor	x	x	x	x
	Constant Gaze Monitoring		x	x	x
	Gaze Tracking				x
	Head Vertex Tracking				x
	Additional external monitor (optional)	x	x	x	x
Operator Interface	Touch-screen on CRT	x	x	x	x
	Keyboard	Opt.	Opt.	Opt.	x
	Motorized Chinrest	x	x	x	x
	Help Menus	x	x	x	x
Patient Data Input	Name, DOB, I.D.,				
	Trial Lens Rx, Visual Acuity, Pupil Size	x	x	x	x
	IOP, C/D, ICD-9 Codes, CPT Codes, Comments		x	x	x
Analysis Software	STATPAC 2™ - Single Field Analysis	x	x	x	x
	STATPAC 2 - Single and Multiple Field Analysis		x	x	x
	STATPAC for Blue on Yellow		x	x	
	STATPAC for SITA	x	x	x	x
	SITA-SWAP (only for 24-2 threshold test)			x	x
	GPA-Software	x	x	x	x
HFA NET	Opt.	Opt.	Opt.	Opt.	
Data Storage	Single 3.5" Floppy Drive	x	x	x	x
	Magneto-optical Disk Drive	Opt.	Opt.	Opt.	x
	40 GB Hard Disk	x	x	x	x
	40 GB Hard Disk with Magneto-optical Drive				x

*) not in HFA 720 i

(subject to change, specifications only valid for Europe)



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