



# Humphrey Field Analyzer 3 from ZEISS

The best just got better

**NEW HFA3  
with  
Liquid Lens  
Technology**



We make it visible.

The moment you discover how your  
NEW Humphrey accelerates clinic flow.  
**This is the moment we work for.**



// INNOVATION  
MADE BY ZEISS



# The new ZEISS Humphrey Field Analyzer 3 featuring Liquid Lens technology

The new Humphrey® Field Analyzer 3 (HFA3) combines everything you've always valued in a Humphrey with more than you could imagine to make it faster, easier and more reliable than ever.

## The best just got better.

### Key benefits

HFA3 provides a streamlined and faster workflow with an array of new features designed to:

**Reduce setup time** with a single trial lens. Using liquid pressure, the new Liquid Trial Lens™ instantly delivers each patient's refractive correction with the touch of a button.\*

**Save time** with an intuitive new SmartTouch™ interface that helps to shorten chair time.

**Accelerate clinic flow** with equipment that can be learned quickly and operated easily.

**Improve confidence** in test results with ReLEYE™. Instantly review the patient's eye position, at any stimulus point.

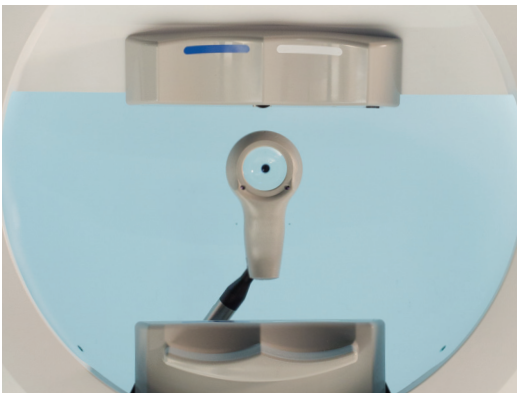
**Gain peace of mind** with seamless transferability of legacy data from the HFA II and HFA II-i to the HFA3.



\* Available correction range is -8 to +8 diopters sphere. Spherical correction only. Liquid Trial Lens available on the HFA3 model 860.



## Faster, easier, more reliable than ever



Liquid Trial Lens

### Liquid Lens technology: One lens, less time

The new automatic Liquid Trial Lens reduces patient setup time by automatically loading each patient's refractive correction from the previous exam. The result is faster patient flow and reduced chance of error when selecting a lens during test setup.

### SmartTouch interface: Ready, set, test!

The new HFA3 platform gets you up and running with fewer touches. Simply select the patient's name and press start, all using an all-new color graphic user interface.

### Exclusive gaze tracking: On track? Know right now

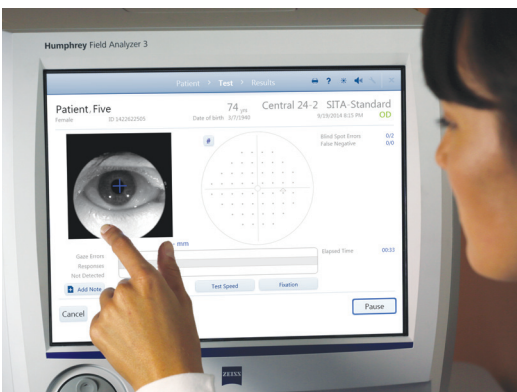
Save time with improved gaze tracking initialization.

### Combined Reports: See the whole picture

ZEISS FORUM® allows the HFA3 to work with ZEISS CIRRUS™ HD-OCT or CIRRUS™ photo to generate combined structure and function reports in a single display.

### Kinetic Perimetry: Significant advancements

Easy to use kinetic graphical user interface with full 180° testing range.

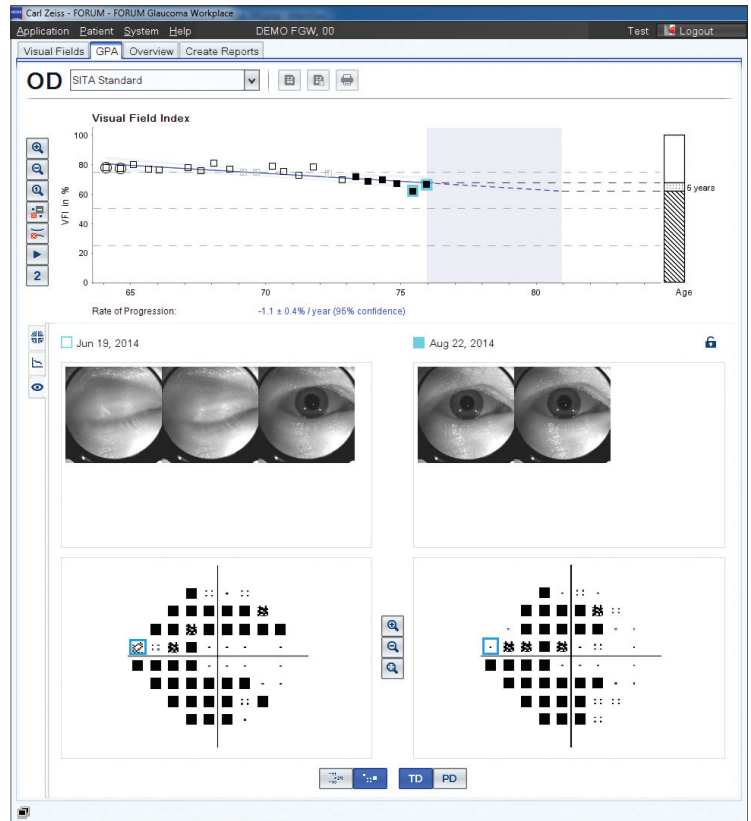


SmartTouch interface

## HFA review with FORUM Glaucoma Workplace from ZEISS

- Review quantitative and qualitative information from all standard HFA analyses, in an easy-to-read format
- Change baselines and capture, track and measure progression simply and easily with Guided Progression Analysis™ (GPA™)
- Use ReIYE to preserve an image of the patient's eye at every stimulus presentation during a SITA™ Standard test
- Assess patient's compliance with ReIYE in both GPA and single-field analysis modes
- Work with either Mean Deviation (MD) or Visual Field Index™ (VFI™)—or both
- Generate HFA reports using a MAC or a PC

## HFA review report with ReIYE and GPA



Example of a report using ReIYE\*

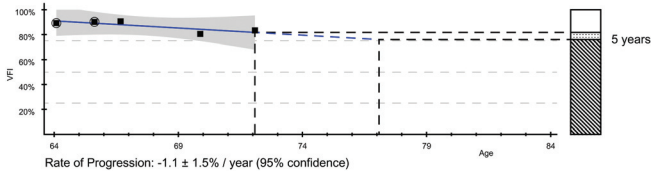


\* ReIYE is available on both the instrument and through FORUM Glaucoma Workplace.



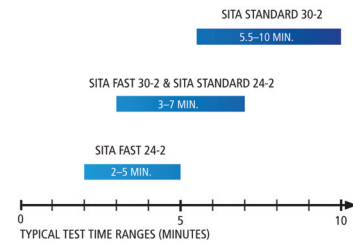
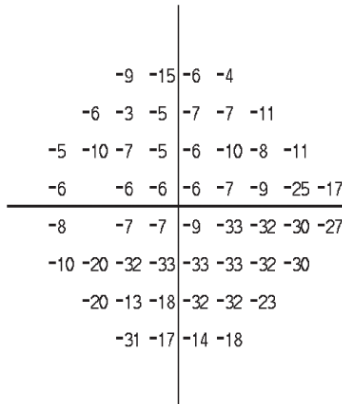
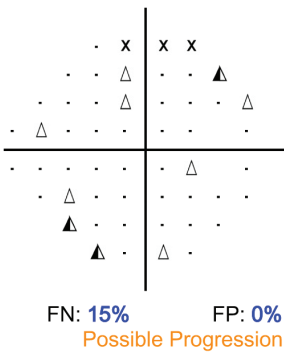
# Everything you expect from a Humphrey

The advances in HFA3 from ZEISS only add to the reliable standard that thousands of practices already depend on for critical diagnoses. The new model still delivers the interactive analysis you need, when and where you need it.



## Visual Field Index

VFI is a simple and intuitive global index. Its most powerful application is GPA, which trends VFI over time.



## GPA Alert

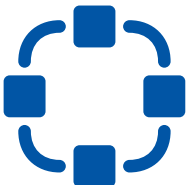
A message in simple language that indicates whether statistically significant deterioration was identified in consecutive visits.

## STATPAC™

The language of perimetry, STATPAC compares results to proprietary age normative and glaucoma databases.

## SITA Strategies

Unsurpassed in efficiency, SITA is patient responsive: It learns to perform as fast as the patient wants to go.



## Connectivity

HFA3 connects to other HFA3 and HFA II-i perimeters. For comprehensive connectivity, HFA3 can be connected to FORUM with FORUM Glaucoma Workplace. HFA3 also supports common file folder sharing used by most Electronic Medical Record Systems (EMRs).

For years, the Humphrey Field Analyzer has brought certainty to glaucoma diagnostics. The HFA3 preserves everything that made its predecessors the gold standard in perimetry—then takes that standard to new heights with innovations that enhance reliability and efficiency.

### Certainty for years with the ZEISS Glaucoma Suite

A broad range of innovative diagnostic and imaging solutions are transforming your point of care. Today, your **ZEISS Glaucoma Suite** delivers a ZEISS solution that can either stand alone or seamlessly integrate into a comprehensive all-practice solution through FORUM that puts critical information at your fingertips—in an instant.



### Partnering with reliable expertise

ZEISS is dedicated to enhancing the long-term value of your investment through a highly skilled field and technical support organization. ZEISS service agreements encompass the full range of support offerings to ensure optimal system uptime and workflow convenience. You can count on ZEISS to support your needs for high productivity and cost containment while delivering the optimum in customer care.

# Technical data

## Specifications

### The HFA3 that's right for you

- The **HFA3 Model 830**, like all models, performs custom static testing with custom static patterns for stimulus sizes I through V, and features Guided Progression Analysis (GPA) to assist in care management over time.
- The **HFA3 Model 840** adds kinetic and custom kinetic testing with improved gaze tracking and head tracking.
- The **HFA3 Model 850** adds vertex monitoring, blue-on-yellow (SWAP) and the new ReEYE monitor.
- The **HFA3 Model 860** delivers all these features and adds the automated Liquid Trial Lens.

Specifications	Humphrey FDT	Humphrey Matrix 800	HFA3			
			830	840	850	860
<b>Test specifications</b>						
Maximum temporal range (degrees)	30	30	90	90	90	90
Stimulus duration	200-400 ms	300 ms	200 ms	200 ms	200 ms	200 ms
Visual field testing distance	Infinity	Infinity	30 cm	30 cm	30 cm	30 cm
Background illumination	100 cd/m <sup>2</sup>	100 cd/m <sup>2</sup>	31.5 ASB	31.5 ASB	31.5 ASB	31.5 ASB
<b>Threshold test library</b>						
N-30	•	•				
C-20	•					
24-2, 30-2, 10-2, Macula		•	•	•	•	•
60-4, Nasal step			•	•	•	•
<b>Threshold test strategies</b>						
MOBS	•	•				
ZEST		•				
SITA Standard, SITA Fast, Full Threshold, FastPac			•	•	•	•
SITA-SWAP					•	•
<b>Suprathreshold test library</b>						
C40, C76, C80			•	•	•	•
C64, C-Armaly			•	•	•	•
C-20	•					
N-30	•	•				
24-2		•				
Peripheral test patterns			•	•	•	•
<b>Suprathreshold test modes</b>						
Age corrected	•	•	•	•	•	•
Threshold related, Single intensity			•	•	•	•
<b>Specialty test library</b>						
Social Security Disability, monocular, binocular			•	•	•	•
Esterman monocular, binocular, superior 36, 64			•	•	•	•
Kinetic testing				•	•	•
Custom Kinetic testing				•	•	•
Custom Static testing			•	•	•	•



Features	Humphrey FDT	Humphrey Matrix 800	HFA3			
			830	840	850	860
<b>Fixation control</b>						
Heijl-Krakau blind spot monitor	•	•	•	•	•	•
Video eye monitor		•	•	•	•	•
Gaze tracking				•	•	•
Head tracking				•	•	•
Vertex monitoring					•	•
<b>Operator interface</b>						
Display	LCD	LCD	Touch-screen LCD			
Keyboard		•	•	•	•	•
<b>Stimulus</b>						
Frequency doubling	•	•				
White-on-white			•	•	•	•
Red- or blue-on-white				•	•	•
Blue-on-yellow (SWAP)					•	•
<b>General testing features</b>						
Stimulus sizes	10°	2°, 5°, 10°	Goldmann I-V	Goldmann I-V	Goldmann I-V	Goldmann I-V
Foveal threshold testing				•	•	•
Automatic pupil measurement				•	•	•
Liquid Trial Lens (AutoTLC)						•
RelEYE eye review					•	•
<b>Test storage</b>						
User-defined		•	•	•	•	•
<b>Software features</b>						
Single Field Analysis (SFA)			•	•	•	•
Glaucoma Hemifield Test (GHT)		•	•	•	•	•
Visual Field Index (VFI)			•	•	•	•
Guided Progression Analysis (GPA)			•	•	•	•
Serial field overview		•	•	•	•	•
Networking		•	•	•	•	•
FORUM Connectivity		•	•	•	•	•
DICOM Connectivity		•	•	•	•	•
<b>Printer</b>						
Thermal printer	•					
Native generic PCL 3, PCL 5 and postscript printer support for local, shared and networked printers		•				
Native postscript printer support for network capable printers			Optional	Optional	Optional	Optional
<b>Data storage, retrieval and analysis</b>						
Hard drive		250 GB	500 GB	500 GB	500 GB	500 GB
USB		•	•	•	•	•
CD-R/W drive		•				
<b>Dimensions</b>						
Height	17" (43 cm)	17" (43 cm)	23" (58 cm)			
Width	10" (25 cm)	12.2" (31 cm)	20" (51 cm)			
Depth	19" (48 cm)	33.5" (85 cm)	18" (46 cm)			
Weight	19 lbs (8.6 kg)	37.5 lbs (17.4 kg)	63 lbs (28.7 kg)			
<b>Electrical requirements</b>						
	100-120V, 50/60Hz 230V, 50/60Hz	100-240V~, 50/60Hz, 200VA max	100-120V~, 50/60Hz, 4.0A 230V~, 50/60Hz, 1.8A			
<b>Standards</b>						
Meets UL, CSA and CE standards	•	•	•	•	•	•



**Humphrey Field Analyzer**



**Carl Zeiss Meditec, Inc.**

5160 Hacienda Drive  
Dublin, CA 94568  
USA

Toll Free: +1 800 341 6968  
Phone: +1 925 557 4100  
Fax: +1 925 557 4101  
info@meditec.zeiss.com  
www.zeiss.com/HFA3



**Carl Zeiss Meditec AG**

Goeschwitzer Str. 51-52  
07745 Jena  
Germany

Phone: +49 36 41 22 03 33  
Fax: +49 36 41 22 01 12  
info@meditec.zeiss.com  
www.meditec.zeiss.com

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