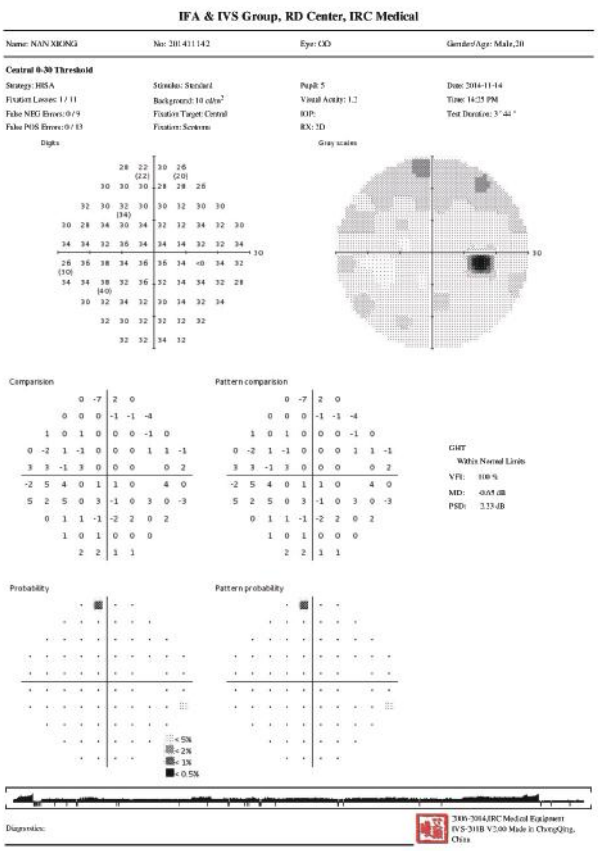
VisuScience

Perimeter

IFA Series & IVS Series

Reliable Accurate Flexible

Listen to the clinical



Standard Full Field White on White Perimetry

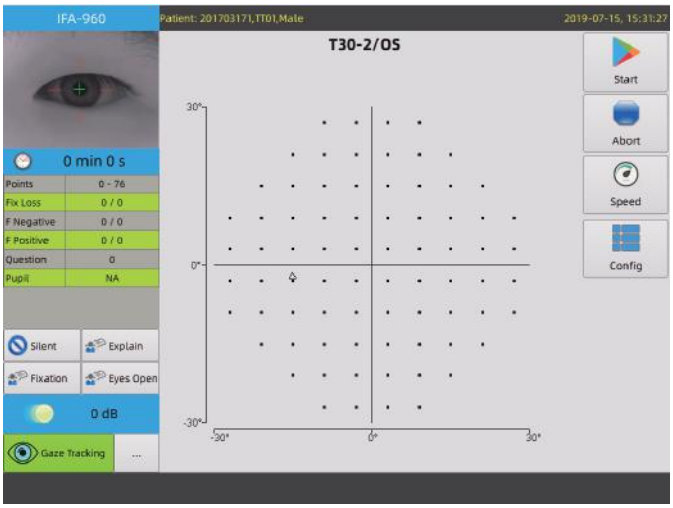
The IFA and IVS' series offer a wide range of test patterns and strategies, including T30-2, T24-2, T10-2 for glaucoma diagnosis and T-Macula for macula function assessment. In addition, special test patterns like driver feasibility, monocular/binocular social security disability are also included. For better detection of visual field loss caused by early stage glaucoma, points of T30-2 and T24-2 are cautiously configured on the most sensitive position of retinal nerve fiber bundle. The report format is Zeiss Humphrey style for easy review and comparison with other devices.

Precise Diagnosis

Strictly conforming to the newest perimentry standard of IMAING and PERIMETRY SOCIETY, IFA and IVS' series simultaneously fulfill the needs for ophthalmological and neurological uses.

Equipped with world-wide accepted 31.5 asb background illumination and incorporated with efficient HISA algorithm,comprehensive fixation control and age-related normal database, IFA and IVS' series result is highly consistent with Goldmann standard perimeter.

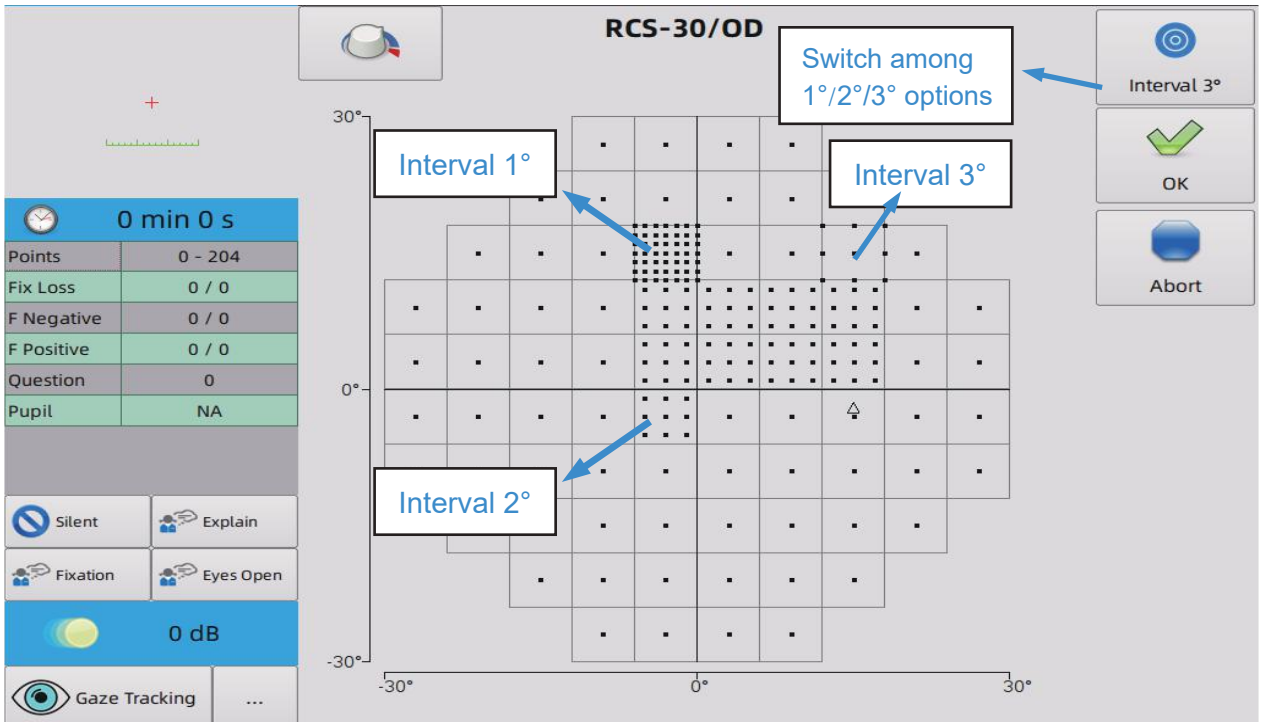
Its aspheric dome effectively shrinks its size, while ensuring the full field test range.



Regionally Condensed Stimuli Test (RCS)

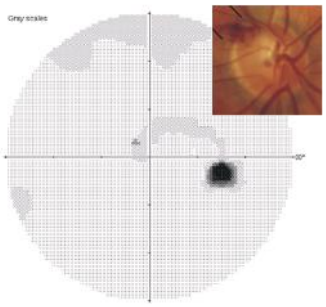
RCS is specially developed in IFA-950/IFA-960. It enables users to add more stimuli around each standard stimulus to increase the accuracy in detecting vision loss.

For instance, the test is divided into 76 grids in RCS-30 test. Doctors can add more stimuli in each grid with density of interval 1°/2°/3° options.



The application of RCS test can be used in following 2 scenarios.

Scenario 1



In the superior paracentral visual field, the RCS report clearly demarcates a circumscribed paracentral small retinal nerve fiber–related scotoma corresponding to a previous splinter hemorrhage shown in the (inset) optic disc photograph (the optic disc is turned upside down).

Scenario 2

For confirmed glaucoma patients, doctors need to see the visual field status both for macula and peripheral area to track the progression. Conventionally, this was done through one T30-2 test plus one T10-2 test.

With RCS, this can be done with only one test of RCS-30 or RCS-24.

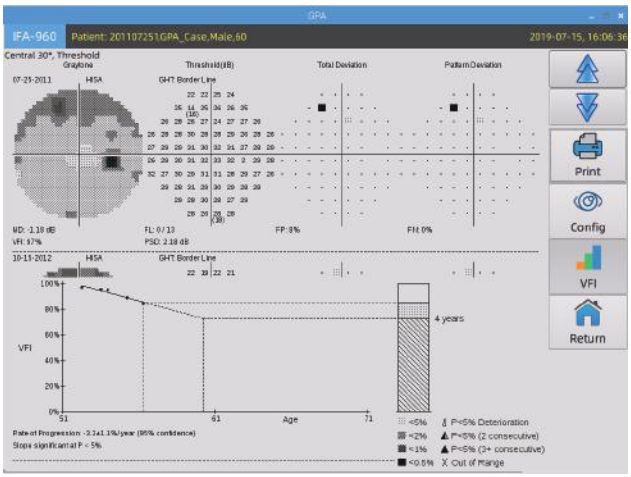
RCS-30 = T30-2 + T10-2

RCS-24 = T24-2 + T10-2

- Optimize workflow
- Save time and trouble for both patient and doctor

Glaucoma Progression Analysis

IFA and IVS' series can accurately differentiate clinically significant progression of visual field loss from random variability within a series of follow up tests, providing an advanced, reliable method to enhance the management of glaucoma. It really helps identify rapidly progressing, high-risk patients.

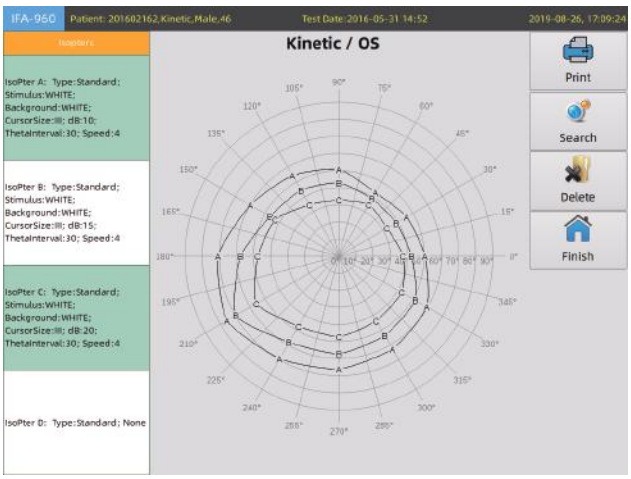


Kinetic Perimetry

Kinetic perimetry is supported by IFA-960.

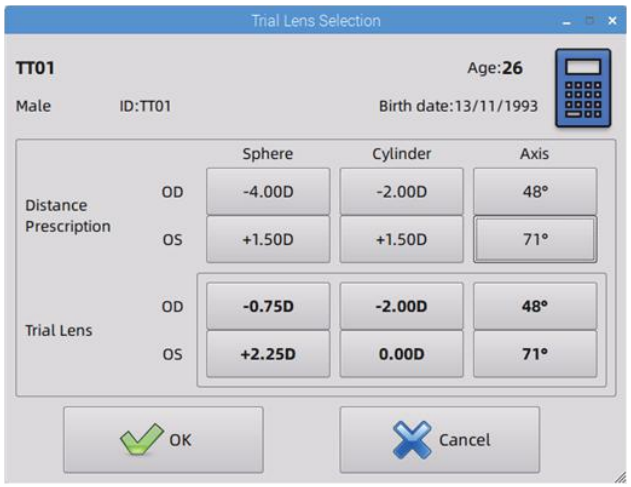
It can depict the range of patient's visual field. The range of visual field varies by the intensity and size of light spot.

The kinetic perimetry can be applied to assessing the change of visual field and the field difference between eyes.

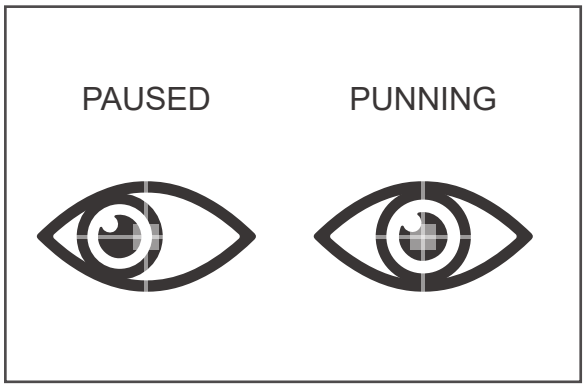


Trial Lens Selection

IFA and IVS' series perimeters provide trial lens calculation function. Users can input the distance prescription data and the system will calculate the suitable trial lens for perimetry test automatically.



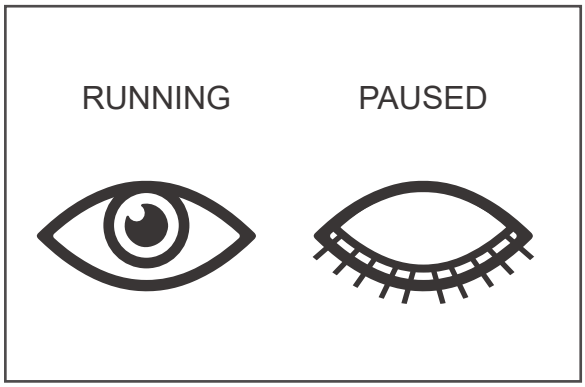
Reliable Perimetry Test



Gaze Tracking

Minimize effects of unreliable response

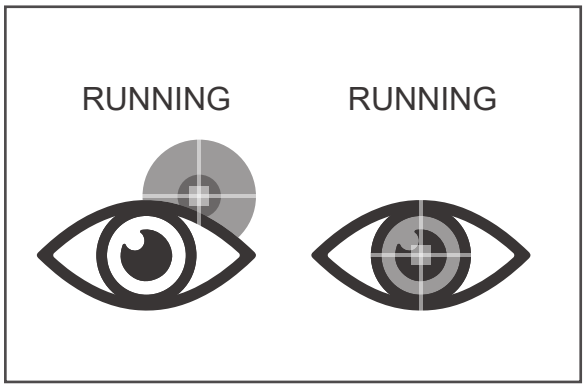
“Gaze Tracking” constantly monitors the pupil position and patient’s fixation. System beeps to draw patient’s attention when a fixation shift is detected. If fixation shift lasts for a while, system will stop test and inquire operator’s intervention.



Blink Control

Never miss a stimulus

Blink control helps patients avoid from dry eyes and relax them to stay focused in subsequent test. When blink control is on,stimuli during patient's blink will not be counted and will automatically be repeated in later test.



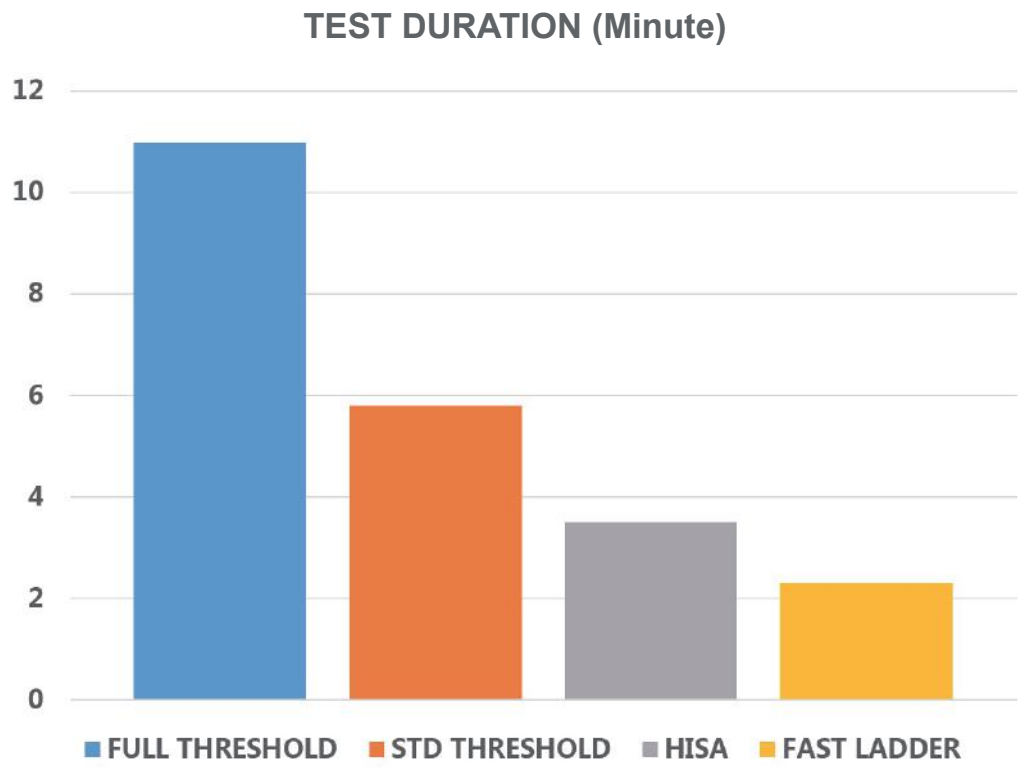
Blind Spot Monitor

System will present stimulus on blind spot periodically. If patient responses one, system will record it as blind spot monitor failure.

From stimulus presents to patient's response, there should be a reasonable time lag. If the patient response incredibly fast, system will record it as a false positive as a reaction to patient's “Happy Trigger".

The gaze tracking graph indicates the fixation condition of the patients. This provide credibility reference of the test report for clinicians’ diagnosis judgment.

Quicker Perimetry



We extremely value the time of patients and operators. On the premise of consistent accuracy, we continue to innovate its testing algorithm and has developed HISA, a more reliable, more time-saving Heuristic Interactive Threshold Searching Algorithm.

HISA-Heuristic Interactive Threshold Searching Algorithm

HISA forecasts initial threshold for new point through a complex mathematical model, which takes neighboring tested results and same age normal values into consideration. Then unnecessary search will consequently be avoided. During test process, HISA intelligently skips those “undoubted” questions regarding the change of neighboring point’s value.

HISA is not likely to initiate all points but do a sample survey from some specific location. Subsequently, time will be saved for patients with serious reduction of sensitivity by skipping those high-sensitivity questions.

HISA will adjust the stimuli interval adaptively according to the patient’s response lag. With HISA, young, quick patients will experience a happier, faster and more reliable test. And older, sluggish patients will not miss the response in long stimuli intervals.

HISA will evaluate the reliability of the tested points through a complex reliability function. Besides, HISA will automatically retest the suspected result.

HISA will … with other know-how techniques and mathematical models, HISA is bound to be the most reliable and accurate threshold testing strategy.

Compact Computer and Smart System

IFA and IVS' series adopt a card-size micro computer equipped with Linux system. The advantages are below:

- Low power consumption
- Low noise operation (no fan installed)
- Simple structure delivers high reliability
- Safer data storage against virus

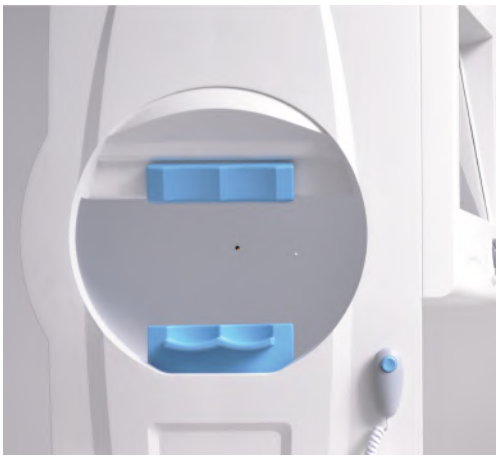
LED Light Source

IFA and IVS' series innovatively adopt LED light source in comparison with other models in the market which use halogen bulb. With LED light source, IFA and IVS' series have following advantages:

- Low light declination
- No need to calibrate periodically
- Strictly conforming to the newest perimetry standard
- Built-in sensor to detect illumination abnormality

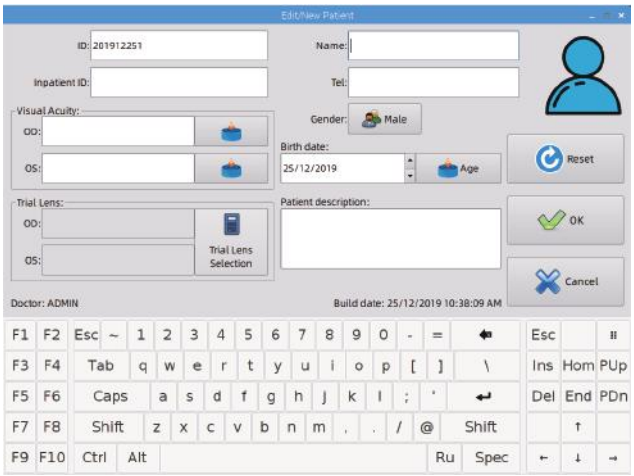
Easy to Clean Diffuse Surface

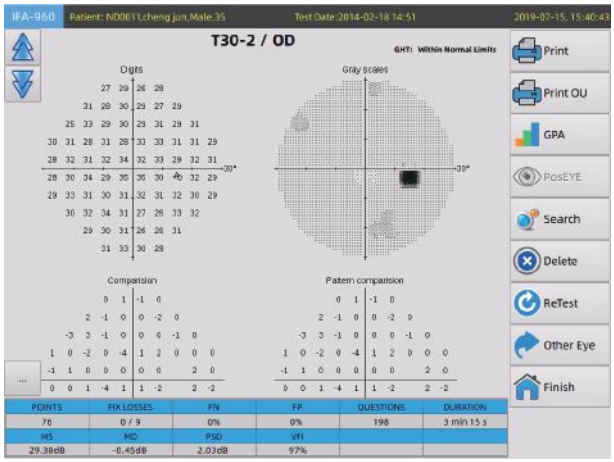
IFA and IVS' series diffuse surface are directly made by dedicated chemical etching on its injection mold. It can be cleaned with damp cloth if coated with dust.

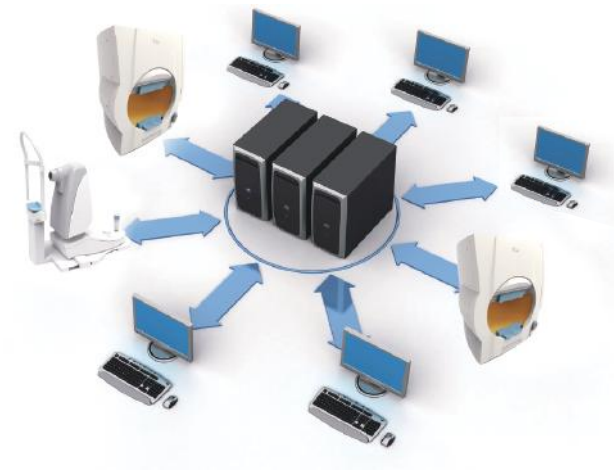


Intuitive User-Friendly Interface

The user interface is elaboratively designed for easy operation to the operators. All the operations can be done by touching the screen simply. IFA and IVS' series provide multi language support including English, Spanish，Russian，Italian and Ukrainian.

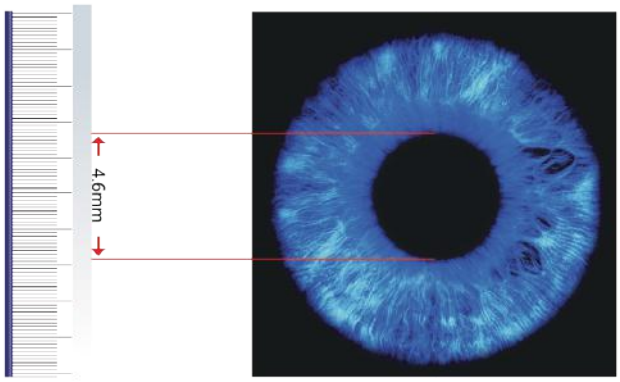






Instant Networking & E-report

Benefits from the supported DICOM protocol, IFA and IVS' series can be configured to connect with any EMR system which conforms to the DICOM standard.



Automated Pupil Measurement

The system can automatically measure patient's pupil diameter and print it on report. This benefits comprehension of the correlation between pupil size and perimetry result, then avoid wrong report interpretation with too small pupil size.

Specification	IVS-201B	IVS-201A
Stimulus Generation	Hidden LED Array	
Max Temporal Range	90°	
Testing Distance	30cm	
Background Illumination	31.5asb (10cd/㎡)	31.5asb (10cd/㎡), 315asb (100cd/㎡)
Stimulus Size	Goldmann Ⅲ	
Stimulus Intensity	0.08asb ~ 10,000asb (0 ~ 50 dB)	
Stimulus Duration	200ms, customizable	

TEST STRATEGY

Threshold Strategy	Full Threshold, Fast Ladder, HISA, Standard Threshold	
Threshold Test Patterns	T30-2, T24-2, T10-2, T-Macula, T60-4, T60-2	
Screening Test Patterns	S-64, S-76, S-40, S-60, S-64, S-76	
Specialty Test Patterns	D-30, D-60, EM-M, EM-B, Horizontal	D-30, D-60, EM-M, EM-B
Customized Test	N/A	Yes
Screen Strategy	Two Zone, Three Zone, Quantify Defect	
Blue/Yellow Perimetry	N/A	T24-SWAP, T30-SWAP
Colored Perimetry	N/A	Blue Stimuli
Fixation Monitor	Heijl/Krakau blind spot monitor, Infrared video eye monitor, Gaze tracking, Fixation tracking, Pupil measurement, Blink control	
Software Features	Visual Field Index, Glaucoma Hemifield Test(GHT), Single Field Analysis, Serial Field Overview, HISA Analysis, Glaucoma Progression Analysis(GPA), Networking, Horizontal Analysis	Visual Field Index, Glaucoma Hemifield Test(GHT), Single Field Analysis, Serial Field Overview, HISA Analysis, Glaucoma Progression Analysis(GPA), Networking, SWAP analysis, DICOM, Customized Program
Responder	Hand held, Foot pedal (Option) (for upper limb disabled)	

BUILT-IN SYSTEM

Operating System	Dedicated OS (immune for general computer viruses)
Operator Interface	15'' LCD touch screen, Keyboard & Mouse (Option)
Data Storage	≥32GB, More than 1,000,000 test results
Data Backup	Networking, Flash Disk (option), Portable Hard Disk (option)
Networking	Ethernet & WIFI

OTHERS

Input Voltage	AC 100 - 240V, 50 ~ 60Hz
Power Consumption	100VA
Dimension	560 x 490 x 600 (mm) (W/D/H)
Weight	25kgs

Specification	IFA-900	IFA-950	IFA-960
Stimulus Generation	Front Projection LED		
Max Temporal Range	90°		
Testing Distance	30cm		
Background Illumination	31.5asb (10cd/㎡)	31.5asb (10cd/㎡), 315asb (100cd/㎡)	
Stimulus Size	Goldmann Ⅲ	Goldmann I-V	
Stimulus Intensity	0.08asb ~ 10,000asb (0 ~ 50 dB)		
Stimulus Duration	200ms, customizable		

TEST STRATEGY

Threshold Strategy	Full Threshold, Fast Ladder, HISA, Standard Threshold		
Threshold Test Patterns	T30-2, T24-2, T10-2, T-Macula, T60-4, T60-2, T-NS(Nasal Step)	T30-2, T24-2, T10-2, T-Macula, T60-4, T60-2, T-NS(Nasal Step), T30V-2	T30-2, T24-2, T10-2, T-Macula, T60-4, T60-2, T-NS(Nasal Step), T30V-2, RT30-2, GT30-2
Screening Test Patterns	S-40, S-60, S-64, S-76, S-80, SF-81, SF-120, SF-135, SF-246, S-Armaly, S-NS(Nasal Step), SS-36, SS-64, SF-Armaly		
Specialty Test Patterns	EM-M, EM-B		
Customized Test	N/A	Yes	
Screen Strategy	Two Zone, Three Zone, Quantify Defect		
Blue/Yellow Perimetry	N/A	T24-SWAP, T30-SWAP	
Regional Condensed Test (Micro Perimetry)	N/A	RCS-30, RCS-24	
Kinetic Perimetry	N/A		Standard, Scotoma Map, Blind Spot Map, Static Points, Custom Scan
Colored Perimetry	N/A	Blue Stimuli	Blue Stimuli, Red Stimuli, Green Stimuli
Fixation Monitor	Heijl/Krakau blind spot monitor, Infrared video eye monitor, Gaze tracking, Fixation tracking, Pupil measurement, Blink control		
Software Features	Visual Field Index, Glaucoma Hemifield Test(GHT), Single Field Analysis, Serial Field Overview, HISA Analysis, Glaucoma Progression Analysis(GPA), Networking	Visual Field Index, Glaucoma Hemifield Test(GHT), Single Field Analysis, Serial Field Overview, HISA Analysis, Glaucoma Progression Analysis(GPA), Networking, SWAP Analysis, DICOM, Customized Program	
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OTHERS

Input Voltage	AC 100 - 240V, 50 ~ 60Hz
Power Consumption	100VA
Dimension	560 x 490 x 600 (mm) (W/D/H)
Weight	30kgs

CE FDA Approval

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