OCTOPUS 900
Reliably assess static & kinetic visual fields
In 1945, Professor Hans Goldmann of the University of Berne, together with Haag-Streit, developed the Manual Goldmann perimeter. This instrument is still the reference for kinetic perimetry today and all of its capabilities and specifications are built into the Octopus 900. Furthermore, Haag-Streit has pioneered many significant innovations in static perimetry, including automated testing, direct projection system, global indices, fast strategies and outstanding software for visual field analysis.

Addressing all major perimetry needs, the Octopus 900 is the visual field analyser of choice for anyone who wants the diagnostic flexibility to analyse, assess and track patients’ visual fields.

It makes it possible to run standard central and peripheral visual fields with minimum test duration, seamlessly integrated into your clinical environment. This supports high patient throughput and effective practice management. Everything you can ask of a perimeter is offered in one easy-to-use device, which delivers results you can trust, every time.
Covers all your clinical needs

The Octopus 900 performs standard white-on-white threshold testing in just 2-4 minutes. With its flexible Octopus and HFA-style printouts and its comprehensive test library for central and peripheral tests, it covers all your clinical needs.

A smooth transition from HFA

All Octopus perimeters allow you to seamlessly import your historic HFA data. If replacing an existing visual field analyser or extending clinical capabilities, you can enjoy a smooth transition from an HFA to an Octopus perimeter.

As raw data is imported, you can display your new and historic data in the format of your choice, either in HFA style or in Octopus mode.

Cost-effective electronic records

As the Octopus 900 is controlled by a separate PC, Haag-Streit’s EyeSuite analysis software is free to be installed on multiple viewing stations.

If it is connected to a server database, real-time access to data can be achieved, whilst analysis beyond the pre-defined printout may be undertaken from anywhere on the network.
Everything you need in one device

The Octopus 900 offers a wide range of test patterns including; 24-2 and 10-2 for routine testing, unique physiology-based patterns that correlate with nerve fibre bundles and the binocular Esterman. Its 90-degree radius Goldmann bowl permits 180-degree full field testing, allowing additional peripheral testing, including true kinetic perimetry, for more complex clinical presentations.

Top fast-thresholding strategy

Tendency Oriented Perimetry (TOP) presents a further optimisation in fast-threshold testing by reducing the examination time by nearly 80%, to just 2–4 minutes.

The TOP algorithm is a systematic method which takes the correlation of the threshold values in neighbouring locations into account.

Since the first test points are presented at a supra-threshold level, even inexperienced patients quickly understand the nature of the test.

Increased efficiency

The shorter test time enables a more efficient practice, faster patient throughput and improved clinical workflow.
SENSITIVE GLAUCOMA ANALYSIS

Cluster analysis

The sensitive cluster analysis groups visual field defects along nerve fibre bundles and combines high sensitivity with good specificity to detect early glaucomatous changes. Significant defects are highlighted and the cluster defects can be used for structural comparison. Cluster analysis is available in both single field and trend view.

Combining structure & function

Combining the results of both structure and function is the key to obtaining a comprehensive assessment of the onset and progression of glaucoma.

The Octopus polar analysis projects local visual field defects along the nerve fibres to the optic disk and displays them oriented as structural results. This makes structure-function correlation almost intuitive.

Full testing flexibility

Besides standard white-on-white perimetry with a Goldmann III stimulus, the Octopus 900 also offers a Goldmann size V stimulus for low vision patients. In addition, it also performs blue-on-yellow and flicker perimetry, for early glaucoma detection and provides corresponding normative databases for each of those stimuli.

The flexible custom test function also allows the operator to create any test needed for an individual patient, or clinical research study.
TRUE GOLDMANN KINETIC PERIMETRY

**Fully-flexible**

With the Octopus 900, kinetic vectors can be defined anywhere and with all the characteristics available in the manual Goldmann perimeter. Additionally, user-defined templates help generate fast and reproducible results when defining standard isopters and mapping the blind spot, as well as for ptosis, driving standards and functional vision loss.

**Simplified & more consistent operation**

Benefit from the flexibility of a manual Goldmann but enjoy a modern, simplified and more consistent operation. Vector speed is controlled and repeatable, the influence of the operator and patient reaction time is eliminated and normal isopters provide guidance.

**The vectors of your choice**

Place vectors anywhere and in any direction you want, in either semi-automatic or manual mode. Static points are also possible and isopters can be defined manually or in automatic mode, if the isopters are regularly shaped.

**Adaptable templates**

The Octopus 900 allows you to standardise your clinical workflow without losing the flexibility to adapt to individual situations. Your kinetic testing protocols can be translated into a template to standardise your methodology. Templates can then be adapted depending on pathology or patient response, with vectors added or deleted during the test.
Reliable results made easy

Fixation losses, due to low patient compliance, are a major reason for unreliable visual fields. The Octopus 900 offers Blink Control, Pupil Position Control and Automated Eye-Tracking (AET). These features continuously encourage the correct patient alignment and eye position, producing reliable results you can trust.

Never miss a point

With Octopus Blink Control, you never need to worry about missing a stimulus presented in static perimetry. Stimuli interrupted by a patient blinking are automatically repeated again later in the test. This means every test location is assessed reliably.

Controlled position

Maintaining the correct pupil position during an examination is essential for correct identification of the location of a defect.

If the pupil position changes during stimulus presentation, due to either shifting of the head or eye movement, the Pupil Position Control pauses the examination automatically, until the pupil is re-centred. This stimulus is then repeated later in the test.

Minimise artefacts

Positioning the pupil in the centre of the trial lens is essential to prevent lens rim and anatomical artefacts. Automated Eye-Tracking recognises the position of the pupil and keeps the pupil centred by automatically moving the head and chin rest into the ideal position.
INTEGRATION, NETWORKING & SUPPORT

EyeSuite

Whether you use a Haag-Streit biometer, perimeter, or imaging system, you always use the same EyeSuite software. Intuitive and easy-to-use, EyeSuite utilises the same patient management, preferences, import/export functionality and back-up process across all Haag-Streit devices. This simplifies your clinical processes by shortening the learning curve of your staff.

Free networking

Many diagnostics are performed by technicians in a separate room. EyeSuite is free and ready to be networked throughout your clinic, allowing you to have access to the data from any workstation. This allows you to analyse your data and plan future treatment comfortably from your desk, eliminating any risk of losing paper-based data. Furthermore, the EyeSuite Script Language or standard interfaces, such as DICOM, connect easily to almost any Electronic Medical Record (EMR) system.

Service & support

With the demands on the NHS and private hospital eye clinics ever increasing and the need to limit equipment down-time, it is vital that you have a trusted service provider that you can call the minute you identify any performance issues.

The HS-UK Service Division is the only Haag-Streit authorised Octopus service centre in the UK. Offering Gold, Silver or Bronze service contracts, each is designed to give you full peace-of-mind and allows you to choose the contract that meets your individual needs.
OCTOPUS 900 TRAINING & EDUCATION

Comprehensive suite of learning management tools

Haag-Streit UK understands the importance of comprehensive training and education, both in terms of device operation and clinical applications.

That’s why we have developed an extensive suite of education and training content, including; on-site customer training, live events, e-learning courses and video user guides.

On-site training

Soon after an Octopus 900 is installed, each customer is provided with an on-site training workshop, which is delivered to all key members of staff.

Workshops are usually facilitated by our Product Manager, an expert in both the operation and clinical applications of the Octopus system.

These workshops cover all the areas necessary to allow you to begin using your device effectively. This includes; setting-up and calibrating your system, entering and amending patient data, patient positioning, patient testing and result evaluation, as well as other functions such as creating customised tests and data exporting.

The information provided in these workshops is replicated in a handy user guide, which is provided to each member of your team.

In addition to this guide, short videos detailing each key area of device operation are available via the Haag-Streit UK website.
Online e-learning courses

With each system we install, customers are given a copy of the “Visual Field Digest”, a guide to perimetry focusing on the Octopus system, which was written by six experts in the field.

The Clinical Education and Training Division of Haag-Streit UK has developed online e-learning content, which uses the Digest as a framework.

This allows you to work through the book, chapter-by-chapter, testing your growing knowledge and monitoring your progress.

As you work through the e-learning content, you will accumulate achievement points, which can be redeemed against discounted registration for Octopus live events.

Octopus live events

For those users who want to get more out of their Octopus 900 system, we provide live interactive training events, UK-wide.

Delivered by experienced clinical speakers and product experts, these events give you the opportunity to pick up hints, tips and valuable information during clinical lectures and test simulation workshops.

These regional events give delegates the opportunity to network with fellow Octopus 900 users, learn from the experts and gather important CPD points.

The Hill-RBF Calculator works for all biconvex IOLs, from +6DS to +30DS and is designed for short, normal and long eyes. It is able to tell a user when a calculation is accurate and when care should be taken because of biometry parameters that do not allow accurate IOL prediction.

The Calculator finds the right pattern to lead to an accurate IOL prediction based on the following input parameters; Axial Length (AL), Anterior Chamber Depth (ACD) and Corneal Curvature (K). Combined with a boundary model, the Hill-RBF method only provides a result if the respective prediction is accurate with a very high-probability.

Unlike the static theoretical formulae used for IOL calculation, the Hill-RBF Calculator is a totally new method. The Calculator boasts an adaptive, dynamic learning process where data is continuously updated. This means the higher the number of surgical outcomes entered, the better the overall depth of accuracy becomes.

The Hill-RBF Calculator is exclusively licenced on the LENSTAR and is available on the current version of EyeSuite. All LENSTAR Pro users will have access to it and LENSTAR Essential users can upgrade to Pro at any time.

“In our clinical practice, we find that it’s essential for the assessment of our Neuro cases. We see an awful lot of patients who have strokes and also various tumours, in particular, we see a lot of patients with Pituitary tumours. We see various types of stroke and we find that post-stroke fatigue is a particular problem. So those patients find kinetic much easier to do than static.

A further indication is that we use it with patients who’ve got Glaucoma, but with moderate to severe visual field loss, and in those cases it’s really important to plot the peripheral visual field when we get a good feel for their functional vision that’s remaining.”

Fiona Rowe
Associate Professor NIHR
University of Liverpool

"EyeSuite is incredibly easy to use because it functions the way that we all function in our day-to-day lives now, which is on a computer screen. I can merge data at the touch of a button."

Richard Madonna
Department of Clinical Education
SUNY College of Optometry

"All the old Humphrey fields can be imported into EyeSuite, so you can compare those with the Octopus that were done that day. So, you have a meaningful ability to analyse change over time."

Randy Craven
Chief
Wilmer Eye Institute

"It allows me to see what the parts of the field that are of most concern and to quickly identify where I have to look at the details.

The EyeSuite progression software helps me to make decisions because it has the Trend analysis feature. The Trend analysis feature I’ve found has been very helpful in distinguishing just noise and fluctuation from actual true change and so allows me to be more confident that what I'm seeing is not actually just a bad day for the patient, but may actually represent true worsening over time.

The EyeSuite progression analysis is a key benefit for me as a user, as it is so easy for me to use. It presents the information in a user friendly format."

Jonathan Myers
Associate Professor
Ophthalmology
Wills Eye Hospital

"I needed something to increase and improve our efficiency and quality of care with visual field testing with our patients. We needed a test and a procedure that was easy to set up, fast, performs well and delivers accurate data. EyeSuite and the Octopus 900 deliver that for me."

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