

AP-600

TEST PARAMETERS & TECHNICAL SPECIFICATION



Frey

from **GO Grafton Optical**

AP-600 Technical Specification

Technical Specifications	AP-600
Maximum temporal range (degrees)	90
Stimulus duration	200 ms/ 500 ms or 0.1-9.9s user selectable
Visual field testing distance	30 cm
Background illumination	31.5 ASB

AP-600 Features

Feature	AP-600
Auto & manual kinetic	Standard
Custom kinetic test patterns	Standard
Custom static test patterns	Standard
DICOM OPV (Ophthalmic Visual Field)	Standard
DICOM Worklist modality	Standard
Remote Diagnostics and Software Loading	Standard
TIA testing algorithms, equivalent to SITA™ (1)	Standard
TIA-SWAP equivalent to SITA-SWAP™ (1)	Standard
Stimulus size	I-V
Automatic pupil measurement	Standard
Stimulus Color	White, Blue, Red, Green
Foveal threshold testing	Standard
Digital Eye Tracking (DETECT)	Standard
Vertex monitoring	Standard
Progression Analysis	Standard
Glaucoma Hemifield Test (GHT)	Standard
Field of View Index (FVI)	Standard
EyeSnap function	Standard
Single Field Analysis (SFA)	Standard
Serial field overview	Standard

(1) Copyrighted by Zeiss, equivalent technology is available from AP-600.

AP-600 Threshold test patterns

Test Pattern	Extent of Visual Field Tested/ Number of Points Tested	Application
Central 30-2	30 degrees/76 point grid	Glaucoma, retinal, neurological, general
Central 24-2	24 degrees/54 point grid	Glaucoma, general, neurological
Central 10-2	10 degrees/68 point grid	Macula, retinal, neurological, advanced glaucoma
Central 24-2C	24 degrees/64 point grid	Glaucoma, general, neurological
Peripheral 60-4	30 to 60 degrees/60 points	Retinal, glaucoma
Macula	5 degrees/16 points, 2 degrees spacing	Macula
Nasal Step	50 degrees/14 points	Glaucoma

Additional test fields can be easily added on AP-600 using test editor

AP-600 Suprathreshold test patterns

	Extent of Visual Field Tested / Number of Points Tested	Application
Central 40 Point	30 degrees/40 points	General screening
Central 64 Point	30 degrees/64 points	General, glaucoma, neurological
Central 76 Point	30 degrees/76 points	General, glaucoma, neurological
Central 80 Point	30 degrees/ 80 points	General Screening
Armaly Central	30 degrees/84 points	Glaucoma
Nasal Step	50 degrees/14 points	Glaucoma
Peripheral 60 Point	30 to 60 degrees/60 points	General, neurological with central exam, retinal, glaucoma
Full Field 81 Point	55 degrees/81 points	General, retinal, glaucoma, neurological
Full Field 120 Point	55 degrees/120 points	General, retinal, glaucoma, neurological
Full Field 135 Point	87 degrees/135 points 87 degrees temporally	Full Field Screening
Full Field 246 Point	60 degrees/246 points	Full Field Screening
Armaly Full Field	50 degrees/98 points	Glaucoma
Superior 36 Point	60 degrees, superior 36 hemifield/36 points	Superior Field Screening, Ptosis
Superior 64 Point	60 degrees, superior 64 hemifield/64 points	Superior Field Screening, Ptosis
Esterman Monocular	75 degrees temporal 60 degrees nasal/100 points	Functional disability
Esterman Binocular	150 degrees bitemporal/ 120 points	Functional disability
Gandolfo	100 points	Italian disability test

Additional test fields can be easily added on AP-600 using test editor



AP-600 Threshold test settings

AP-600 Parameter	Description
TIA-Superfast	TIA-Superfast (equivalent to SITA-Faster) reduces test time approximately 30% faster than TIA Fast and 50% faster than TIA Standard for the same patient tests. It is available with the Central 24-2 and Central 24-2C patterns only. TIA-Superfast allows to add selected central locations to the 24-2 test pattern to create an enhanced test pattern that can complete in the same time (or less) as 24-2 TIA Fast. You can choose between running a quicker TIA 24-2 visual field or a TIA Superfast enhanced test pattern with the additional points. Test pattern 24-2C will be run using TIA Superfast strategy only.
TIA-Fast	This is a faster version of TIA. TIA-Fast (Equivalent to SITA Fast) is available for use with the Central 30-2, Central 24-2, Central 10-2, and Peripheral 60-4 test patterns.
TIA-Standard	TIA-Standard (Equivalent to SITA Standard) cuts testing time in half relative to the Full Threshold strategy, is available for use with the Central 30-2, Central 24-2, Central 10-2, and Peripheral 60-4 test patterns.
TIA-SWAP	This strategy uses TIA with Blue-Yellow testing. TIA-SWAP testing is only available for use with the Central 24-2 test pattern.
Full Threshold	Use with all Threshold test patterns. In Full Threshold testing, an initial stimulus is presented at a level the patient is expected to see. If seen, the stimulus intensity is decreased in 4 dB steps (0.4 log units) until the patient no longer sees the stimulus; if not seen, it is increased in 4 dB steps until seen. The instrument then changes direction, moving in 2 dB steps until a change in patient response occurs. The last stimulus seen by the patient is recognized as the threshold for that point.
Fast Threshold	Use with all Threshold test patterns. In Fast Threshold testing, an initial stimulus is presented at a level the patient is expected to see. If seen, the stimulus intensity is decreased in 4 dB steps until the patient no longer sees the stimulus; if not seen, it is increased in 4 dB steps until seen. The instrument then changes direction, moving in 2 dB steps until a change in patient response occurs. The last stimulus seen by the patient is recognized as the threshold for that point.
Foveal Threshold	A threshold value for the fovea will not be measured.

AP-600 Suprathreshold test settings

AP-600 Parameter	Description
Two Zone	For each point in the test pattern, a stimulus is presented 6 dB brighter than the expected threshold. Since testing is done with an intensity 6 dB brighter than the expected threshold, Points Not Seen are known to be at least 6 dB deep. Use with all Suprathreshold test patterns. Esterman tests use only the Two Zone test strategy.
Three Zone	Same as Two Zone, except each missed point is measured again at a maximum intensity of 10,000 apostilbs (0 dB) to determine if the defect is absolute. Use with all Suprathreshold test patterns except the Esterman tests.
Quantify Defects	Same as Two Zone, except the sensitivity at each missed point is measured relative to the expected threshold. Use with all Suprathreshold test patterns except the Esterman tests.
Age Corrected	Vision is most acute at the fovea and decreases toward the periphery of the retina resulting in a hill of vision with the peak occurring at the fovea. A hill of vision is assigned to the patient based on the patient's age. Age Corrected mode is used only with Size III, White stimuli, and can be used with all Suprathreshold test patterns except the Esterman tests.
Threshold Related	A hill of vision is assigned only after threshold values for 4 primary points are determined. Use with all Suprathreshold test patterns except the Esterman tests.
Single Intensity 10dB	Available only with the Two Zone test strategy. Esterman tests use only the Single Intensity test mode. It uses a default intensity level of 10 dB to test the entire visual field. The default can be changed except with the Esterman tests.
Two Zone	For each point in the test pattern, a stimulus is presented 6 dB brighter than the expected threshold. Since testing is done with an intensity 6 dB brighter than the expected threshold, Points Not Seen are known to be at least 6 dB deep. Use with all Suprathreshold test patterns. Esterman tests use only the Two Zone test strategy.