



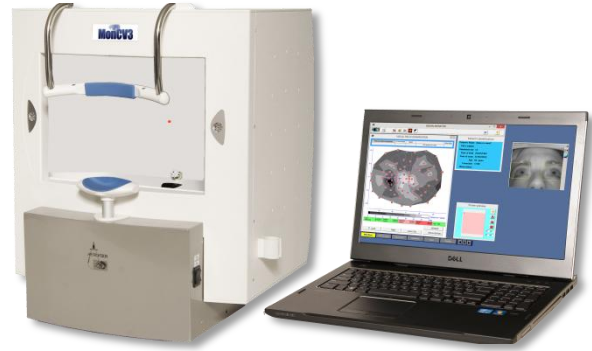
Vision Monitor MonCV3

MULTIFUNCTION VISUAL PERIMETRY SYSTEM

MonCV3 is a multifunction system combining, in a unique compact apparatus, several tests needed for a complete, throughout evaluation of visual functions.

MonCV3 performs conventional perimetry as well as F.A.S.T. perimetry (Fiber Adapted Static Testing Perimetry) that relies on a specific arrangement of testing points corresponding to the most frequent alterations of the retina and optic nerve fibers. These exams are designed to provide a maximum of clinically useful information within the minimum amount of time.

MonCV3 can perform, as options, blue over yellow perimetry and motion perimetry as well as other tests such as visual acuity, vision tests under low contrast and low luminance conditions, glare test, macular pigment density, pupillometry, attention visual field



Available applications and options

- | | | | |
|---|--------------------|--|-----------|
| • Static perimetry | PVM-CVS | • Pupillometry | PVM-PU |
| • Goldmann perimetry | PVM-CW | • Macular pigments | PVM-PI |
| • Blue/Yellow perimetry | PVM-CV blue/yellow | • Metamorphopsia | PVM-ME |
| • Motion perimetry | PVM-CV motion | | |
| • Attention visual field | PVM-UF | | |
| • Contrast sensitivity | PVM-SC | • Electric table | HVM-TABLE |
| • Visual aptitudes (Landolt, ETDRS, glare test) | PVM-AC | • Optical correction set with large lenses | HVM-OPTI |

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Visual field exams

MonCV3 includes a high resolution monitor with calibrated luminance and contrast which is used to test the central visual field, up to 30 degrees of eccentricity. By shifting the fixation spot, the peripheral field can be tested up to 60 degrees of eccentricity. Additional light sources are placed along the horizontal meridian and allow the evaluation of the horizontal limits up to 75 degrees of eccentricity.

Background luminance 10 cd/m²
Stimulus size Goldmann III and V



Video monitoring



Near infrared camera

MonCV3 includes a high resolution, near infra-red video sensor which is used to monitor the fixation of the patient, and to measure the pupil size (option)

Blue/Yellow perimetry



The apparatus can generate blue color tests with Goldmann size V which are projected over a high luminance yellow background (100 cd/m^2), for the detection of early glaucoma deficits.

Motion perimetry



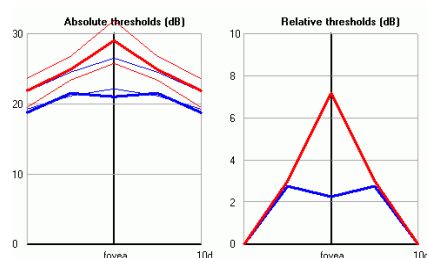
Motion stimulation has increased sensitivity for the detection of deficits of the magnocellular system (glaucoma).

Motion stimulation is also less sensitive to optical factors and allows reducing artifacts due to ocular media diffusion and refractive blur.

Macular pigment density exam

This program performs an estimation of the macular pigment optical density by comparing the threshold of detection of red and blue stimuli presented in the foveolar, para-foveolar and macular zones.

It allows also the follow-up of exams and the comparison of results to the eye fundus image.



ESTIMATION DE LA DENSITE DES PIGMENTS MACULAIRES = 4,92dB (1,44 6,07)

Visual aptitudes: visual acuity, Landolt and ETDRS



LANDOLT and ETDRS tests for visual acuity are performed at distances of 1 m, 2.5 m and 4 m.

The optotype luminance is 100 cd/m^2 .

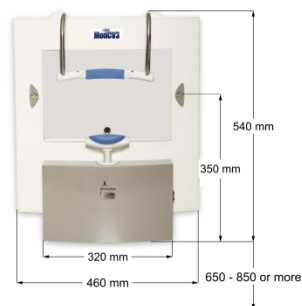


The contrast sensitivity tests are performed with sinusoidal gratings with controlled spatial frequencies, luminance and contrast.



For the glare test, the instrument is equipped with sources of very high luminance ($> 20\,000 \text{ cd/m}^2$) positioned on the side of the screen.

Dimensions



Specifications

Electrical specifications : classe I - type B

Power requirements : 230V, 0.7A or 110V, 1.4A, 50 or 60Hz.

To prevent electric shock, the instrument must be plugged into an earth grounded outlet.

Weight

25 kg (without PC, printer and electric table)

Interface

Connects to a standard PC via two USB2 cables.