



SYNAPSYS VNG

VIDEONYSTAGMOGRAPHY SYSTEM

DESCRIPTION

SYNAPSYS VNG is the Synapsys line of video nystagmography systems, ideal for a complete vestibular analysis thanks to the wide range of available tests, which includes both vestibular and oculomotor tests. Available in two configurations (**Screening** and **Standard**), which differ in the features offered, SYNAPSYS VNG can make use of either wireless or wired cameras.

Users looking for a wireless camera can also choose goggles from two models: **Goggles Flex** (more flexible and adjustable to any face shape) or **Xpress mask** (more reliable for an intensive use and easier to clean).

SYNAPSYS VNG can also be optionally equipped with a binocular **VISIO** mask, which allows simultaneous recording of the movements of both eyes during oculomotor tests.

TECHNICAL SPECIFICATIONS

- Wireless Camera with Goggle Flex




- **Battery:** 3,7 V, 1200 mAh
- **Battery life:** 3 hrs continuous operation at 25°C
- **Resolution:** 640 px (H) x 480 px (V)
- **Consumption:** 300 mA
- **Field of view:** 100° (H) x 55° (V)
- **Image framerate:** 30 fps
- **Weight (without battery):** 70 g
- **Material:** plastic with foam cushions, biocompatible, hypoallergenic, phthalates free
- **Occluder:** with mechanical closure


- Wireless Camera with Xpress mask



- **Battery:** 3,7 V, 1200 mAh
- **Battery life:** 3 hrs continuous operation at 25°C
- **Resolution:** 640 px (H) x 480 px (V)
- **Consumption:** 300 mA
- **Field of view:** 100° (H) x 55° (V)
- **Image framerate:** 30 fps
- **Weight (without battery):** 70 g

- **Material:** plastic with foam cushions, biocompatible, hypoallergenic, phthalates free
 - **Occluder:** with magnetic closure

- **Wired VNS4X camera with Goggle Flex**

 - **Power supply:** 12 V DC
 - **Definition:** 744 px x 480 px (Horizontal x Vertical)
 - **Consumption:** 315 mA
 - **Cable length:** 7 m
 - **Field of view:** 100° x 55° (Horizontal x Vertical)
 - **Sampling rate:** 25 Hz
 - **Weight:** 150 g (without cable)
 - **Material:** plastic with foam cushions, biocompatible, hypoallergenic, phthalates free
 - **Occluder:** with mechanical closure

- **Binocular VISIO mask:**

 - **Power supply:** 5 V CC
 - **Definition:** 752 px x 480 px (Horizontal x Vertical)
 - **Consumption:** 250 mA
 - **Cable length:** 7 m
 - **Field of view:** limitless (Horizontal), 55° (Vertical)
 - **Sampling rate:** 50, 100 or 200 Hz depending on the version
 - **Weight:** 270 g (without cable)
 - **Material:** plastic with foam cushions, biocompatible, hypoallergenic, phthalates free

- **Medical device (Directive 93/42/EEC):** Class IIa
- **Standard:** EN 60601-1 / EN 60601-1-2

AVAILABLE EXAMS	Model	
	Screening	Standard
Vestibular tests:		
- Positional / Spontaneous nystagmus	✓	✓
- Caloric nystagmus	✓	✓
Oculomotor tests:		
- Saccades		✓
- Smooth pursuit		✓
- Gaze		✓
- Optokinetic nystagmus		✓
Kinetic test		Opt.

Subjective Vertical Visual (SVV)		Opt.
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FEATURES

Visual stimulation controlled via software		✓
Fixation light during tests	✓	✓
Ocular fixation index computing for caloric test	✓	✓
Video recording	✓	✓
Software upgradeability	✓	✓

SYSTEM CONFIGURATION

Wireless Camera with Goggle Flex		Depending on model
Wireless Camera with Xpress mask		Depending on model
Wired VNS4X with Goggle Flex		Depending on model
Binocular VISIO mask		Opt.
Remote controller	✓	✓
VNG Software	✓	✓

SYSTEM REQUIRMENTS

Windows 10	✓	✓
Windows 11	✓	✓
Processor Intel I5-6xxx (at least 6 th generation), 8 GB RAM	✓	✓
2 video outputs (Dual View mode)		✓
Video projector (not included)		✓
USB port	USB 2.0	USB 2.0

SOFTWARE

- **VNG software installed as module in Maestro software:** possibility to manage patients, execute the exams, store and visualize results in a unique database
- **Available results:**
 - **Curves:** horizontal and vertical ocular position, slow phase velocity and cumulative curves
 - **Nystagmus parameters:** direction and frequency, slow phase velocity (SPV)
 - **Caloric test:** Unilateral weakness, Reactivity, Fixation index, Preponderance
 - **Oculomotor tests:** latency, velocity, precision, gain with normative diagrams
- **Visual stimulation:** Video projector or second monitor, controlled via software

PRODUCT CODES

11463: SYNAPSYS VNG Screening with wireless camera (w/ Goggle Flex)

11464: SYNAPSYS VNG Standard with wireless camera (w/ Goggle Flex)

11455: SYNAPSYS VNG Screening with wireless camera (w/ Xpress mask)

11456: SYNAPSYS VNG Standard with wireless camera (w/ Xpress mask)

10619: SYNAPSYS VNG Screening with wired camera

10620: SYNAPSYS VNG Standard with wired camera

OPTIONAL ACCESSORIES

11768: VISIO mask for binocular open field testing w/ 50 Hz camera

11835: VISIO mask for binocular open field testing w/ 100 Hz camera

11771: VISIO mask for binocular open field testing w/ 200 Hz camera

11963: Additional wireless camera

11013: Additional wired VNS4X camera

11471: Room camera

10859: Video projector for VNG systems

10888: Subjective Visual Vertical (with gamepad)

10910: SYNAPSYS MED4 Rotary Chair

10741: Multi-frequency vestibular vibrator (30, 60, 100 Hz)

DISPOSABLES AND CONSUMABLES

10886: Disposable goggles kit (goggles + 5 sets of disposable foam cushions)

10887: 5 sets of disposable foam cushions (foam alone without goggles)

11735: 8 sets of disposable foam cushions (foam alone without goggles)

MANUFACTURER

Synapsys S. A.

2, rue Marc Donadille

13013 Marseilles (France)