



### **Better Tests, Better Data, Better Patient Care. Simply A Better VNG.**

Are you testing what you think you are?

Neuro Kinetics I-Portal<sup>®</sup>-VNG offers the most precise, extensive and clinically superior package of oculomotor tests on the market. The team at Neuro Kinetics believes the better the data, the better the test, and the better the clinician's diagnosis can be. Better diagnosis leads to more efficient and cost effective care.

Over 90 million Americans report symptoms of dizziness to their doctors; the number two complaint heard by physicians overall and the number one complaint for patients over the age of 70. There is no shortage of patients requiring quality diagnostic evaluation and care.



- Extensive battery of tests in compact system.
- Push button interface designed for easy use by all clinicians.
- Unparalleled eye torsion data to document positioning test results.
- Full field optokinetics provide true OPK test.
- Integrated fixation light makes caloric fixation simple and accurate.
- Protocols and tests easily customizable.

### **I-Portal<sup>®</sup> Falcon<sup>™</sup> VOG Eye Tracker**

- 100 Hz binocular, USB VOG goggle.
- Optional upgrade to 250+ Hz.
- Torsion, horizontal, vertical and pupilometry.
  - Ideal for BPPV testing.
- Lightweight and comfortable.
- Integrated fixation.
- Real time video, data and analysis.
- US patents and patents pending.

### **Pursuit Tracker<sup>™</sup> Oculomotor Stimulus**

- Patent pending laser diode system displays an unmatched range of stimuli.
- True smooth pursuit testing.

### **Optokinetic Stimulus**

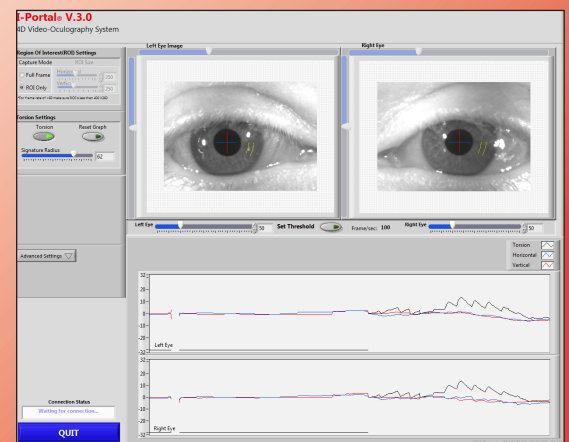
- Projects full field light pattern required for true OPK system evaluation.

### **Subjective Visual Vertical and Horizontal**

- Evaluate utricle function quickly and easily.
- Hand held controller for line adjustment.

### **I-Portal<sup>®</sup> VEST<sup>™</sup> VNG Software**

- Real time binocular data and stimulus feedback.
- Analysis manager utility allows user to save filter settings and redefine defaults.
- Onscreen, interactive foot pedal guide.
- Expanded binocular eye recording.





### I-Portal®-VOG 100Hz Binocular with Integrated Fixation

Eye measurements:	Torsional, horizontal, vertical, and pupilometry
Image acquisition:	USB-3 compatible digital camera;
Illumination:	Infra-red emitting diodes; 940nm wavelength, continuous near frontal illumination (adjustable); <10 mW/um2
Spatial resolution:	<0.1°
Linearity error:	± 0.1% FSR
Measurement range:	Up: 20°, Down: 25°, Horizontal: ±35°, Torsional: ±18°
Field of view:	Up: 20°, Down: 25°, Horizontal: ±40°
Goggle size and weight:	220 grams, 7"x2.75"x2"
Patents:	US Pat. No. 7,448,751; 7,520,614 B2; 7,651,224; 7,665,845; 7,731,360; 7,753,523; and 7,866,818; other patents pending or awarded

### Pursuit Tracker™ Oculomotor Stimulus (patent pending)

Velocity:	0 to 10,000 deg./sec.
Acceleration:	> 1,000,000 deg./sec. <sup>2</sup>
Position accuracy:	±5 arc seconds
Repeatability:	±5 arc seconds



### Optokinetic Stimulus

Velocity:	up to 400 deg./sec.
Velocity Accuracy:	±0.5% full scale

### Safety

Patient is isolated from all internal voltages (< or = 12 Vdc) and ground.

### Compliance

System designed around the following standards:

- ANSI S3.45 - 2009 Procedures for Testing Basic Vestibular Function.
- EN 60601-1 3rd Edition. Medical Electrical Equipment - Part 1

### Support and Training

- Web enabled assistance for live, interactive help.
- High quality technical and clinical service team.

## Cart Based VNG Packages

### I-Portal® Super VNG Systems SVNG-1 and SVNG-2

- Dual axis Pursuit Tracker™ (Horizontal and Vertical)
- Full field Optokinetic Stimulus
- I-Portal®-VOG 100Hz Binocular Eye Tracker
- Medical grade portable equipment cart
- Multi-function foot switch controller
- High speed computer with 2 LCD monitors
- Hand control for Subjective Visual Vertical and Horizontal (option - not included in all configurations)
- Air or Water Caloric Irrigator (option)
- I-Portal®-VEST™ VNG Software
  - Calibration (Saccade and Pursuit)
  - Smooth Pursuit (Horizontal and Vertical)
  - Saccades (Horizontal and Vertical)
  - Spontaneous Nystagmus
  - Gaze Nystagmus (Horizontal and Vertical)
  - Optokinetic Nystagmus
  - Positioning Tests (Hallpikes and Roll Tests)
  - Positional Tests with and without Fixation (Supine, head right, body right, etc.)
  - Calorics (Warm/cool, right/left)
  - Custom Test (Template for customizable test)
  - Subjective Visual Vertical and Horizontal (optional test - not included in all configurations)

## VNG Add On to I-Portal® NOTC

For users conducting oculomotor testing within the I-Portal® NOTC - add on the SVNG-3 supplement package to cover your positional, positioning and caloric tests. SVNG-3 consists of a stand alone goggle system with operating computer and foot switch controller.

