VIP®-300
Pupillometer

NEURO PTICS

VIP®-300 Pupillometer

Very Accurately Measures Pupil Size under Various Light Conditions

Enables clinician to make best possible medical decision for LASIK and premium IOL patients based on pupil size, stated daily activities, and patient preferences.

- Portable, battery operated, hand-held device
- Very accurately measures pupil diameter (±0.03 mm)
- **"Dark"** setting, 2-second measurement
- **"Variable"** setting measures scotopic, low mesopic, and high mesopic pupil sizes in one 12-second sequence to simulate light conditions patient may experience in daily life
- Durable, ergonomic design
- Infrared camera, high precision optics, processor and LED light source

"The NeurOptics® Pupillometer...is very **compact, simple to use,** reasonably priced and **gives accurate automatic readings to 0.1 mm**. An accurate instrument for measuring the scotopic pupil is essential for refractive surgeons."

—James Salz, M.D.

VIP Technology Produces Reproducible Measurement Results

Testing has shown that the NeurOptics® Pupillometer is consistent from unit to unit and operator to operator. In fact, the NeurOptics Pupillometer has the highest accuracy and lowest error of all commercially available pupillometers[1], while at the same time being the most economical hand-held infrared device.

The key to the reproducibility in measurement is the use of VIP® (Vertex Invariant Pupillometry®) technology developed by NeurOptics. This system compensates for the approximate 12 mm range in vertex distance[2] that may lead to inaccurate pupil measurement (error up to 20%), producing accurate measurements that are not affected by vertex distance[3].

Simple to Use and Operate

- One-button activation
- No calibration by the user
- Data is stored on the device and can be recalled and/or printed
- Video of the measurement can be played on the device's screen

References:

[1]Schallenberg M, Bangre V, Steuhl KP, Kremmer S, Selbach JM., Comparison of the Colvard, Procyon, and Neuroptics pupillometers for measuring pupil diameter under low ambient illumination. J Refract Surg. 2010 Feb;26(2):134-43.

[2]Distance from the front surface of the eye to the back of a lens or optical device.

[3]The pupil is never at rest, and therefore a single, static, measurement is unlikely to be an accurate assessment of a pupil's true amplitude or range of diameter. To compensate for pupillary unrest, NeurOptics employs a dynamic measurement system which captures 30 pupil positions over an approximate 2-second scanning period, thus producing the weighted average pupil size and standard deviation.

Ordering Information

NeurOptics® VIP®-300	Part Number
System Includes: VIP®-300 Pupillometer, Charging Station & Power Supply, Eye Cups (2), Carrying Case	VIP3-KIT-01
Optional Accessories	**Part Number**
Printer Kit	NEUR-PRTS445-BT
Barcode Scanner	BCS-CC-01

Caution: Federal (USA) law restricts this device to sale by or on order of a physician. Refer to product package insert for instructions, warnings, precautions and complications.

Bluetooth® Broadcast Range and Frequency

Broadcast Function	Range	Frequency
Bluetooth Barcode Scanner to/from VIP-300 Pupillometer	Up to 100 yards depending on environment	2.45 GHz

Technical Specifications

Parameter	Description
Measurement Characteristics	Input = Human pupil sizing varying from 1 mm–9 mm
	Mean and standard deviation of pupil diameter at different background illuminations
	Accuracy: +/- 0.03 mm
Degree of protection against electric shock	Pupillometer is double insulated (Class II protection)
Classification of the equipment against ingress of liquids	Ordinary equipment
Degree of safety of application in the presence of flammable anesthetic mixture with air or with oxygen or nitrous oxide	The equipment is not an AP or APG category equipment
Mode of Operation	On Demand battery operation
Power Supply	Input: 100-240 VAC +/- 8%
	Output: 6V, 2.8 Amps
Battery	3.7V 3350 mAmp/hour Li: Ion Cell
Operating Environment	Temperature Range: 18° C (65 F) to 30° C (86° F)
	Relative Humidity: 20% to 70% RH. Non condensing at all times
Transportation and storage environment	Temperature Range: 0° C (32° F) to 75° C (167° F)
	Relative Humidity: 10% to 95% RH. Non-condensing at all times
Dimensions	With eye cup = 7.5” H, 3.5” W, 4.5” D
	Without eye cup = 7.5” H, 3.5” W, 3.5” D
Weight	320 grams +/- 10 grams
Classification	Class 1 LED product per IEC 60825

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Pupillary Evaluation...Down to a Science™

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