PLR®-4000
Pupillometer

Available in the UK from

prospect Diagnostics

prospectdiagnostics.co.uk

NEUROPTICS®

PLR®-4000
Pupillometer

Important Research Tool

- Used by researchers and clinicians at leading universities, pharmaceutical companies, and contract research organizations worldwide
- Quickly and accurately measures pupil size and pupillary reactivity

Simple to Use and Operate

- One button activation
- No calibration required
- Portable, battery operated, hand-held device
- Durable, ergonomic design

Features

- Adjustable settings (intensity, duration and onset of light stimulus, duration of measurement, background illumination)
- Data stored on device, results uploadable to external computer via USB
- Accuracy ± 0.03mm
- Video playback and downloading video of last measurement
- Extended pupil recording (≤ 10 minutes) without light stimulus, ≤ 24 seconds with light stimulus

"Great **quantitative tool** for research."

–Sr. Researcher

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, while at the same time being the most economical hand-held infrared device.

Broadcast Function	Range
Init = Maximum Diameter	Maximum pupil size before constriction
End = Minimum Diameter	Pupil diameter at peak constriction
Delta = % Change	(INIT-END)/END as a %
LAT = Latency of constriction	Time of onset of constriction following initiation of the light stimulus
ACV = Constriction Velocity	Average velocity of how the pupil diameter is constricting measured in millimeters per second
MCV = Maximum Constriction Velocity	Maximum velocity of how the pupil diameter is constricting measured in millimeters per second
ADV = Dilation Velocity	The average pupillary velocity when, after having reached the peak of constriction, the pupil tends to recover and to dilate back to the initial resting size, measured in millimeters per second
T75 = Time to reach 75% recovery	The time to reach 75% of the original baseline pupil diameter after the peak of the constriction

"**More insight** on pharmacokinetic data."

—Clinical Study Manager

Ordering Information

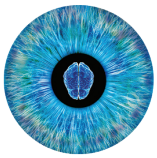
NeurOptics® PLR®-4000	Part Number
System Includes: PLR®-4000 Pupillometer, Charging Station, Power Adapter & Plug, Eye Cups (2), Data Download Cable, Carrying Case	PLR-4000-SYS
Optional Accessories	**Part Number**
Wireless Printer Kit	NEUR-PRTS445

Wireless Broadcast Range and Frequency

Broadcast Function	Range	Frequency
Wireless Printer to/from PLR-4000 Pupillometer	Up to 100 cm depending on environment	2.4 GHz

Technical Specifications

Parameter	Description	
Pupillometer Measurement Detection Threshold	Pupil diameter (minimum)	0.80 mm
	Pupil diameter (maximum)	10.00 mm
	Change in Size	0.03 mm (30 microns)
Size Accuracy	± 0.03 mm (30 microns)	
Degree of protection against electric shock	Pupillometer & Eyecup -Type BF Applied Part provided protection Charging Station & Power Adapter-Type B Applied Part provided 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 Adapter	Input: 100-240 VAC ± -8%	
	Output: 6V, 2.8 Amps	
	RF Wireless Charging Output: 5 W, Qi Compliant	
Battery	3.6 V 11.70 Wh 3350 mAh/hour Li: Ion Cell	
Operating Environment	Temperature Range: 0° C (32° F) to 40° C (104° F)	
	Relative Humidity: Non-condensing at all times.	
Transportation and storage environment	Temperature Range: -38° C (-36.4° F) to 70° C (158° F) Relative Humidity: 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	344 grams ± 10 grams	
Classification	Class 1 LED product per IEC 62471	



NEUROPTICS®

Advancing the Science of Pupillometry and NPi®

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