LABSPION



The LabSpion[®] is a full-size light measurement solution ideal for all light sources from single LEDs to large panels and streetlights. The 2-axis goniometer system captures the full 3D light distribution and the color spectrum, thus giving lighting professionals all necessary data in one measurement.

ALL-INCLUSIVE AND COMPACT

The heart of every Viso measurement system is the fast spectrometer sensor. Equipped with a spectrometer, the system captures not only light quantities but also light spectra. This unique feature enables the system to measure more than just lumen packages, LDT/ IES files, and light distributions. It can also provide color data (e.g., CRI, CCT, TM30, etc.) and even color over angle. As a result, a Viso goniospectrometer eliminates the need for an integrating sphere.

Our spectrometer sensors are based on state-of-the-art transmission grating technology. The continuous (not stepped) goniometer movement allows for a complete C-plane measurement in just 30 seconds, making the data acquisition time for a light measurement exceptionally fast.

In addition, with the built-in power analyzer and accessories such as Viso LabFlicker and Viso LabTemp, your measurements can be consolidated into a single file, including all the necessary data.





The 2-axis goniometer enables full 3D light measurements



Just plug in the USB cable and everything is fully integrated



The main board easily slides out allowing quick updates



The distance is easily detected with the integrated laser



SPECIFICATIONS



For more information, please check www.visosystems.com or contact Viso Systems at info@visosystems.com

KEY ADVANTAGES

- Measures light sources up to 25 kg/ Ø150 cm (55 lbs/ 4.9 ft)
- Fits into relatively small laboratories
- All color and lumen data

 no integrating sphere needed
- An advanced system which is very easy to operate
- Output as customizable reports or raw data

USING THE LABSPION

The LabSpion provides an excellent solution for measuring a wide range of light sources, including outdoor fixtures, automotive lights, and LED panels. The goniometer allows for easy attachment of the light source, and the rotation is both quick and silent. Notably, the LabSpion can handle light sources weighing up to 25 kg and measuring 1.5 m in diameter. For reinforced or extended variants, it can support up to 45 kg and 2.0 m.

The installation process is straightforward, and the system can be fully operational within an hour. Simply install the Viso Light Inspector software, connect your laptop to the built-in power analyzer in the base, and start measuring. Data acquisition from a single C-plane takes approximately 15-30 seconds, meaning that it takes around 2-25 minutes to collect data from all planes.

After measurement, the data is automatically saved in a designated folder in the form of .fixture files. These files can be exported into various formats, including PDF, PNG, IES/LDT, XLS, and CSV. Additionally, you have the flexibility to create custom PDF report templates to suit your needs.



The Viso Light Inspector software is provided as part of the package. This software manages the entire measuring process, including automation, settings, outputs, and your measurement library. It offers a user-friendly interface with intuitive graphics and a wide range of output options

TECHNICAL SPECIFICATIONS

Physical dimensions	LabSpion - VIS	LabSpion - UV-VIS
Dimensions (L x W x H) Weight	1900 x 1900 x 1625 mm (6.2' x 6.2' x 5.3') 103 kg (227 lbs)	1900 x 1900 x 1625 mm (6.2' x 6.2' x 5.3') 103 kg (227 lbs)
Photometric Specifications		
Measurement method	Far field, type C horizontal	Far field, type C horizontal
Spectrometer range	360 - 830 nm, resolution 1 nm, FWHM <5 nm	200 - 850 nm, resolution 1 nm, FWHM <2,2 nm
Sensor distance range	0.5 - 50 m (1.6' - 165')	0.5 - 50 m (1.6' - 165')
Sensor distance setup	Laser Range Finder (accuracy ± 2 mm)	Laser Range Finder (accuracy ± 2 mm)
c-plane rotation	Automatic	Automatic
Light Source diameter range Lamp maximum weight	Max. at 2-axis 1.5 m (4.9') / extended 2.0 m (6.6') 25 kg (55 lbs) / reinforced 45 kg (99 lbs)	Max. at 2-axis 1.5 m (4.9') / extended 2.0 m (6.6') 25 kg (55 lbs) / reinforced 45 kg (99 lbs)
Sensor lux range (equal to candela @ 1 m)	0.20 – 200,000 lux < ±2,5%	$0.40 - 400.000 \text{lux} < \pm 2.5\%$
Sensor candela range	0.05 cd @ 0.5 m to 80,000,000 cd @ 20 m (65.6')	0.10 cd @ 0.5 m to 160,000,000 cd @ 20 m (65.6')
UV output formats		Radiated spectral energy In W/nm Irradiance in µW/cm2 or W/m2 (all directions) 3D UV radiation field
Lumen, candela and W/sr accuracy	360-830 nm< ±4%	200 nm - 250 nm <± 6.5% 250 nm - 400 nm <± 5% 400 nm - 850 nm <± 4%
Color temperature range	1,000 K - 40,000 K <± 35 K	1,000 K - 40,000 K <± 35 K
Color Rendering Index	Up to 100 < ±0,7	Up to $100 < \pm 0.7$
Vertical Resolution, Standard (Highest)	1-5° (Auto-Detect) (0.1°) - accuracy 0.1°	1-5° (Auto-Detect) (0.1°) - accuracy 0.1°
Horizontal Resolution, Standard (Highest)	5°-180° resolution (1°) - accuracy 0.1°	5°-180° resolution (1°) - accuracy 0.1°
Spectrometer Type /Detector Calibration / Re-calibration	Ibsen Photonics FREEDOM / Hamamatsu S11639-01 Fully calibrated on delivery / Min. every two years	Ibsen Photonics FREEDOM / Hamamatsu S11639-01 Fully calibrated on delivery / Min. every two years
Electric		
	USB	USB
Connection Bower supply input		90 to 260 VAC, 50/60 Hz
Power supply input Power Analyzer Range	90 to 260 VAC, 50/60 Hz 0 - 3 A / 0 - 600 W @230 VAC / 0-300 W @110 VAC	90 to 260 vAC, 50/60 Hz 0 - 3 A / 0 - 600 W @230 VAC / 0-300 W @110 VAC