

# PRODUCT LEAFLET

# 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. With a spectrometer the system captures light spectra and not just light quantities. This unique feature enables the system to measure much more than lumen packages, LDT/IES files and and light distributions: All color data (e.g. CRI, CCT, TM30 etc.) and even color over angle. Hence, a Viso goniometer will make an integrating sphere redundant.

Our spectrometer sensors are based on cutting-edge, transmission grating technology. Continuous (not stepped) goniometer movement makes it possible to complete a C-plane measurement in only 30 seconds. This makes the data acquisition time for a light measurement exceptionally fast.

With the built-power analyzer and accessories such as Viso LabFlicker and Viso LabTemp your measurements will include all data in a single file.



- Light distribution
- Beam angle
- Total radiant flux
- Lumen
- Luminous efficiency
- Spectral distribution
- Radiant energy
- Color temperature
- Peak and dominant wavelength
- Chromaticity
- Color rendering

The 2-axis goniometer gives you a full 3D light distribution



Just plug in the USB cable and everything is fully integrated



The main board easily slides out allowing a quick update



The distance is easily detected with the integrated laser



# SPECIFICATIONS

For more information, please check [www.visosystems.com](http://www.visosystems.com) or contact Viso Systems at [info@visosystems.com](mailto:info@visosystems.com) or SAFIBRA, s.r.o. at +420 604 212 525 or [michal@safibra.cz](mailto:michal@safibra.cz)

## KEY ADVANTAGES

- Measures light sources up to 25 kg/ Ø150 cm
- 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 is the ideal way to measure a wide variety of light sources ranging from outdoor fixtures to automotive lights and LED panels. The light source is easily attached to the goniometer and rotation is both quick and silent. Most importantly, the LabSpion handles light sources up to 25 kg and 1.5 m in diameter.

Installation process is very simple too. The system is fully operable within an hour minutes.

Install the Viso Light Inspector software, connect your laptop to the built-in power analyzer in the base, and start measuring. The process is automatic with the option of manual operation. Data acquisition from a single C-plane takes 15-30 seconds, which means that it takes roughly 15 minutes to collect data from all planes.

Measurement data is then automatically saved in a specific folder in the form of .fixture files. They are usually exported into PDF, PNG, IES, LDT and CSV formats. You can create your own custom pdf report templates.



The Viso Light Inspector software is included. The software controls the fully automatic measuring process, all settings and outputs and your measurement library. User-friendly graphics and plenty of output options at your fingertip.

## TECHNICAL SPECIFICATIONS

Physical dimensions	LabSpion - VIS	LabSpion - UV-VIS
Dimensions (L x W x H)	1900 x 1900 x 1625 mm	1900 x 1900 x 1625 mm
Weight	90 kg	90 kg
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	0.5 - 50 m
Sensor distance setup	Laser Range Finder (accuracy ± 2 mm)	Laser Range Finder (accuracy ± 2 mm)
c-plane rotation	Automatic	Automatic
Light Source diameter range	0 – 1.5 m at 2-axis,	0 – 1.5 m at 2-axis,
Lamp maximum weight	25 kg	25 kg
Sensor lux range (equal to candela @ 1 m)	0.20 – 200,000 lux < ±2,5%	0.20 – 200,000 lux < ±2,5%
Sensor candela range	0.05 cd @ 0.5 m to 80,000,000 cd @ 20 m	0.05 cd @ 0.5 m to 80,000,000 cd @ 20 m
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 < ±0,7
Resolution, Standard - Highest (Horizontal)	0.1°-5° (Auto-Detect)	0.1°-5° (Auto-Detect)
Number of c-planes (Vertical)	2 - 144 planes = 2.5°- 180° resolution	2 - 144 planes = 2.5°- 180° resolution
Spectrometer Type /Detector	Ibsen Photonics FREEDOM / Hamamatsu S11639-01	Ibsen Photonics FREEDOM / Hamamatsu S11639-01
Calibration / Re-calibration	Fully Calibrated on delivery/ Min. Every Two Years	Fully Calibrated on delivery / Min. Every Two Years
Electric		
Connection	USB	USB
Power supply input	90 to 260 VAC, 50/60 Hz	90 to 260 VAC, 50/60 Hz
Power Analyzer Range	0 - 3 A / 0 - 600 W @230 VAC / 0-300 W @110 VAC	0 - 3 A / 0 - 600 W @230 VAC / 0-300 W @110 VAC