PRODUCT LEAFLET BaseSpion



The BaseSpion[®] is a great tool for any light measurement laboratory and allows you to measure all mid-sized lighting products. The 2-axis goniometer system captures the full 3D light distribution and color spectrum, giving lighting professionals all the data they need in one measurement.

ALL-INCLUSIVE AND COMPACT

The BaseSpion is a professional laboratory bench top light measurement system. It offers fully automated multiple c-plane measurements.

The heart of every Viso measurement system is the fast spectrometer sensor. With a spectrometer sensor 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. Thus, a Viso goniospectrometer eliminates the need for an integrating sphere.

Our spectrometer sensors are based on cutting-edge, transmission grating technology. Continuous (non-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.





The universal light source bracket easily clicks onto the goniometer



Before measurement, simply slide, align and lock the light source to the center



The base center lock makes it easy to align the light source to the center of rotation



The automatic sensor positioning system ensures accurate distance



SPECIFICATIONS



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

KEY ADVANTAGES

- Measures light sources up to 9 kg/ Ø54 cm (20 lbs/ 21.3")
- Fits into relatively small laboratories
- All color and lumen data no integrating sphere needed

Physical dimensions

- An advanced system which is very easy to operate
- Output as customizable reports or raw data

USING THE BASESPION

The bench-top BaseSpion[®] is a great tool for any light measurement lab. The solution is ideal for measuring LED chips, modules, panels, downlights, bulbs and spots.

The installation process is simple: Place and level the base of the BaseSpion on a steady surface, preferably in a dark room. Mount the goniometer arm and the spectrometer sensor on the base and the system is fully operable within 20 minutes. The distance between light source and sensor is detected automatically. Then, the BaseSpion system is ready for measurement.

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.

TECHNICAL SPECIFICATIONS

BaseSpion - VIS



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 fingertips.

BaseSpion - UV-VIS

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Product specifications are subject to change without notice and may vary from those shown

2025/03

Dimensions (L x W x H) Gross weight	205 - 520 x 56 x 55 cm (6.7' - 16.5' x 1.85 x 1.85') 45 kg (99 lbs)	205 - 520 x 56 x 55 cm (6.7' - 16.5' x 1.85 x 1.85') 45 kg (99 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 - 830 nm, resolution 1 nm, FWHM <5 nm
Sensor distance range	0.35 - 4.5 m (13.8" - 14.8')	0.35 - 4.5 m (13.8" - 14.8')
Sensor distance setup	Automatic Detector on Sensor Rail	Automatic Detector on Sensor Rail
c-plane rotation	Automatic	Automatic
Light Source diameter range	At 2-axis: 0 – 54 cm (0 - 21.3'')	At 2-axis: 0 – 54 cm (0 - 21.3'')
Lamp maximum weight	9 kg (20 lbs)	9 kg (20 lbs)
Sensor lux range (equal to candela @ 1 m)	0.20 – 200,000 lux < ±2,5%	0.40 – 400,000 lux < ±2,5%
Sensor candela range	0.05 cd @ 0.5 m to 4,000,000 cd @ 4.5 m (14.8')	0.10 cd @ 0.5 m to 8,000,000 cd @ 4.5 m (14.8')
UV output formats		Radiated spectral energy In W/nm
		Irradiance in μ W/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
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)	2.5°-180° resolution (1°) - accuracy 0.1°	2.5°-180° resolution (1°) - accuracy 0.1°
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