



LIGHT MEASUREMENT MADE EASY

# LABSPION

VISO:::

The LabSpion® is a complete light measurement solution covering all light sources from small lamps, LED chips, large panels and street lamps. The 2 axis goniometer enables the system to measure the full 3D distribtion field of any lamp giving lighting profesionals comprehensive LDT and IES simulation files.

Using a spectrometer sensor and a built-in power analyzer, the unique Viso technology enables fast measurements and ensures all data to be measured quickly, making other equipment such as integration spheres redundant.

# **MEASURE LUMEN ▶** PEAK CANDELA **▶** COLOUR TEMPERATURE ▶ CRI, CQS **BEAM ANGLE ▶** ANGULAR FIELD DISTRIBUTION **▶** POWER **▶** POWER FACTOR LUMEN PER WATT **EXPORT: IES, LDT, PDF IN 30 SECONDS**

The 2 axis goniometer gives you full 3D light distribution.



Just plug in the USB. Everything is fully integreated.



The main board easily slides out allowing for quick update.



The intergrated laser makes it easy to setup measurement distance.



# **EASY CONNECTIVITY**



# REFERENCE LAMP



The LabSpion includes a tungsten irradiance reference lamp and auto ramp-up power supply. This reference lamp can be used to verify your calibration at any time without the need for external support. It is easliy mounted in the center bracket of the LabSpion.



Far Field

Fully calibrated plug and play solution

# PHYSICAL DIMENSIONS

 $\begin{array}{lll} \text{Shipping weight} & 86 \text{ Kg} \\ \\ \text{Dimensions (L x W x H)} & 190 \text{ x } 190 \text{ x } 162,5 \text{ cm} \\ \\ \text{Weight} & 74 \text{ Kg} \\ \\ \text{Sensor distance} & 0.5 \text{ to } 50 \text{ m} \\ \end{array}$ 

Sensor distance >= lamp length x10 (min x8)
Sensor distance setup Laser range finder (build into sensor)
Lamp diameter range 0 - 1,5m at 2 axis (1 axis up to 6m)

Lamp maximum weight 25Kg

## **ELECTRICAL**

Power supply input 90 to 260 VAC, 50/60 Hz

Power analyser voltage range 90VAC-260VAC <+/- 0.2V

Power analyser current range 0A-3A (Avg: +/- 0.1mA)

Power analyser power range 0W-300W (Avg: +/- 0.01W)

Power analyser sample rate 70.000 samples/sec

# PHOTOMETRIC Measurement method

Calibration

Lumen and candela accuracy +/-4% Max flux, lumen @ 10m 3,000,000 Max flux, lumen @ 20m 12,000,000 48,000,000 Max flux, lumen @ 40m Max intensity, candela @ 10m 1,000,000 Max intensity, candela @ 20m 4,000,000 Max intensity, candela @ 40m 16,000,000 1.000K-10.000K <+/- 35K Colour temperature Colour rendering index 0-100 <+/- 0,7 Angular resolution LOW MODE 2 degrees/step Angular resolution HIGH MODE 0,5 degrees/step Spectrometer type Ibsen Photonics FREEDOM Custom viso (high sensitive transmission grating) Spectrometer range 360-830nm (1024 pixels) Spectrometer detector SONY ILX511B

# BASESPION

The BaseSpion is the perfect solution for any midsize laboratoy that wants advance light measurements in a compact system. Best solution for LED chips, modules, panels, downlights, bulbs and spots.

The BaseSpion® is a great tool for any light measurement laboratory. Allowing you to measure all midrange lighting products. The 2 axis goniometer enables the system to measure the full 3D distribtion field of any lamp giving lighting profesionals comprehensive LDT and IES simulation files.



Universal bracket that easily clicks onto the goniometer.



Before measurement simply slide, align and lock lamp to center.



Base center lock making it easy to fix lamps during alignment.



The automatic sensor positioning system insures accurate distance.





# PHYSICAL DIMENSIONS

Shipping weight 30 Kg Dimensions (L x W x H) 205-360 x 56 x 55 cm Weight 25 Kg Sensor distance 35cm to 450 cm Sensor distance >= lamp length x10 (min x8) Sensor distance setup Automatic rail distance sensor Lamp diameter range 0 - 560mm at 2 axis Lamp maximum weight

## **ELECTRICAL**

Power supply input 90 to 260 VAC, 50/60 Hz Power analyser voltage range 90VAC-260VAC <+/- 0.2V 0A-3A (Avg: +/- 0.1mA) Power analyser current range Power analyser power range 0W-300W (Avg: +/- 0.01W) Power analyser sample rate 70.000 samples/sec

# **PHOTOMETRIC**

Measurement method

+/-4% Lumen and candela accuracy Max flux, lumen @ 1m 30,000 Max flux, lumen @ 2m 120,000 Max flux, lumen @ 3m 270,000 Max intensity, candela @ 1m 10,000 Max intensity, candela @ 2m 40,000 Max intensity, candela @ 3m 90,000 Colour temperature 1.000K-10.000K <+/- 35K Colour rendering index 0-100 <+/- 0,7 Angular resolution BASIC MODE 2 degrees/step Angular resolution HIGH MODE 0,5 degrees/step Spectrometer type Ibsen Photonics FREEDOM Custom viso (high sensitive transmission grating) Spectrometer range 360-830nm (1024 pixels) SONY ILX511B Spectrometer detector Calibration

Far Field

Fully calibrated plug and play solution

# LIGHTSPION

The LightSpion is the only portable system on the market that includes a spectrometer sensor and a built-in power analyser. This light weight professional measurement solution makes it easy to take it anywhere with you.

The portable Viso LightSpion® enables you to fully measure any light source within 30 seconds. It measures all the photometric data, while no expert knowledge is required. The LightSpion can even be used outside of a laboratory or dark room. Making it a great tool for on-site inspections and empowering your sales force.



The case is 5kg, making it exceptional light weight and it is watertight protected.



With built-in power analyser that gives you information instantly.



Quick and easy, the system is pre-calibrated and ready to be used.



With a spectrometer sensor that gives you all photometric data in one system.



# LINEAR LIGHT SOURCES

The LightSpion can measure any light source upto 8cm in diameter. Also, it is the first small goniometer to measure linear lamps, such as LED stips and tubes.

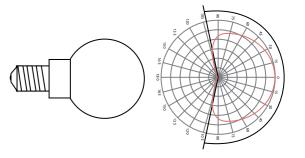


Linear light sources lack photometric specification for the reason that they are few light measurement solutions that can measure linear lamps. The LightSpion supplies a smart solution to resolve this issue.

The linear lamp is mounted on the bracket, then a section of the lamp is measured. Then the real length of the lamp is typed into the Viso Light Inspector to provide the full photometric data. Due to the multiple placement of the LED's, a decrease in the lumen accuracy should be expected of +/-7%.

# REFERENCE LAMP

The LightSpion includes a omni-directional reference lamp, that makes sure you can verify the calibration of your LightSpion system.



The reference lamp includes a document that specifies the light measurement data of the lamp, allowing you to check the integrity of the system at any time.



# PHYSICAL DIMENSIONS

Shipping weight 6 Kg

Dimensions (L x W x H) 43 x 11,5 x 33,5 cm

Weight 5 Kg

Sensor distance 66 cm

Light sources diameter range 0 - 80 mm

Light source maximum weight 2 Kg

# **ELECTRICAL**Power supply input

USB current consumption 200 mA

Power analyser voltage range 90VAC-260VAC <+/- 0.2V

Power analyser current range 0A-3A (Avg: +/- 0.1mA)

Power analyser power range 0W-300W (Avg: +/- 0.01W)

Power analyser sample rate 70.000 samples/sec

90 to 260 VAC, 50/60 Hz

# PHOTOMETRIC

Measurement method Far Field Flux, lumen 10 - 50.000Flux accuracy LED +/- 4%, other types +/-7.82% Intensity, candela 0,05 - 200.000 +/- 2,5% Colour temperature 1.000K-10.000K <+/- 35K 0-100 <+/- 0,7 Colour rendering index Angular resolution LOW MODE 4 degrees/step Angular resolution HIGH MODE 1 degree/step Spectrometer type STS Ocean Optics Calibration Fully calibrated plug and play solution Re-calibration Every 2 years

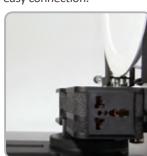
# LIGHTSPION EXTENDER

The Extender is the perfect solution for any small lighting laboratory that wants to improve it's measurement capability to include LED modules, spots and downlights.

The LightSpion Extender® is an excellent tool for measuring larger lamps that exceeds 8cm in diameter. The extender for the LightSpion proivides you with the distance that allows you to measure lamps that are up to 22cm in diameter.



The power outlet is placed on the goniometer, it allows easy connection.



It has an automatic center adjustment, both horizontally and vertically.



It includes a high precision belt drive, it can handle up to 5Kg.

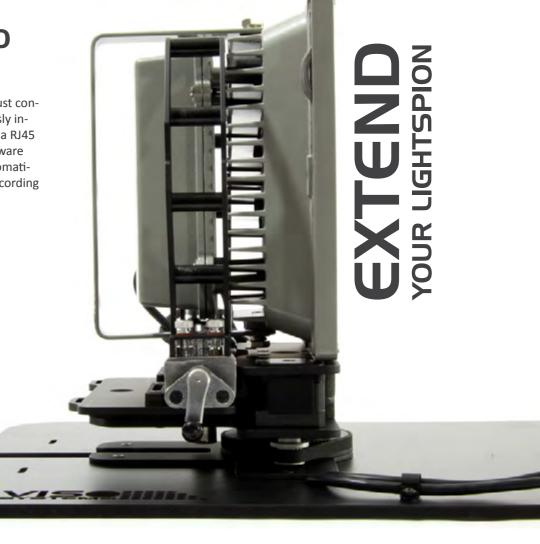


The automatic centre adjustement bracket makes it easy to mount any lamp.



# CONNECT AND EXTEND

To install the LightSpion Extender just connect the platform with the previously installed LightSpion suitcase through a RJ45 connector. The Light Inspector software then detects the Extender and automatically adjusts the calibration data according to the new setup.



# PHYSICAL DIMENSIONS

Shipping weight 8 Kg

Dimensions (L x W x H) 175 x 43 x 28 cm

Weight 7 Kg

Sensor distance 115 and 182 cm

Light sources diameter range 0 - 220 mm

Light source maximum weight 5 Kg

# **ELECTRICAL** (LightSpion)

Power supply input

USB current consumption 200 mA

Power analyser voltage range 90VAC-260VAC <+/- 0.2V

Power analyser current range 0A-3A (Avg: +/- 0.1mA)

Power analyser power range 0W-300W (Avg: +/- 0.01W)

Power analyser sample rate 70.000 samples/sec

90 to 260 VAC, 50/60 Hz

# PHOTOMETRIC (LightSpion)

Measurement method Far Field Flux, lumen 10 - 375.000LED +/- 4%, other types +/-7.82% Flux accuracy Intensity, candela 0,05 - 1.500.000 +/- 2,5% Colour temperature 1.000K-10.000K <+/- 35K Colour rendering index 0-100 <+/- 0,7 Angular resolution LOW MODE 4 degrees/step 1 degree/step Angular resolution HIGH MODE Spectrometer type STS Ocean Optics

Calibration Fully calibrated plug and play solution

Re-calibration Every 2 years

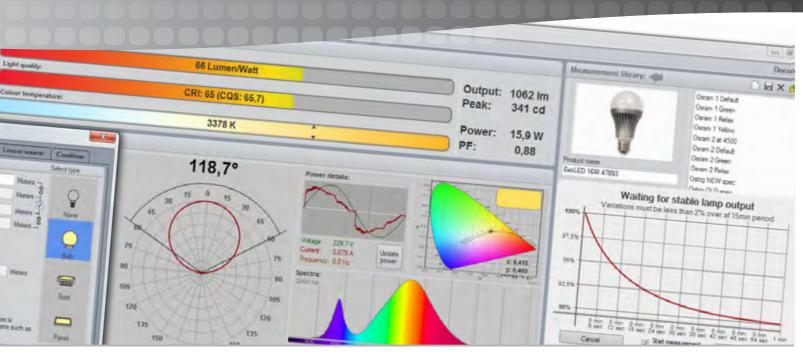
# LIGHT INSPECTOR

CONTACT



The Viso Light Inspector® software is a intuitive interface and it is included in all Viso Light measurement products. The software shows all the data being measured in real time and the photometric result are graphically represented to give you a fast overview of all measurements.

Our worldwide network of partners will be able to support you with any question you might have. We are looking forward to assisting you.



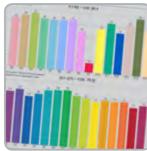
# **CLICK AND GO**

- GRAPHICAL EFFECIENCY AND QUALITY
- ► REALTIME MEASUREMENT DATA
- **▶** ADD CUSTOM TEXT AND IMAGE
- ► GRAPHICAL POWER ANLYZER
- **▶** FULL AUTO SPECTROMETER SETUP
- **▶** DETAILED ANGULAR FIELD DISTRIBUTION
- **▶** DIRECTLY EMAIL RESULTS
- ▶ GET PHOTOMETRIC IN A 90°/120° CONE
- **▶** CONNECT DIRECTLY TO MATHLAB
- ► COMPABILITY WINDOWS XP, 7,8 10

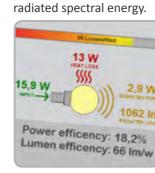
With only ONE click, fully automatic setup of the goniometer.



CQS and TM30 values.



An extensive color quality data results, including CRI,

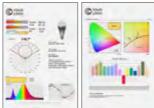


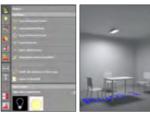
Real power effeciency can

be calculated using the

PDF

EXPORT





**EXCEL** 

LDT

ies.



You can easily add dimensions to your lamps for an accurate representation.



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