



SOLARONIX



# SOLARONIX

## Lumixo

Based on Solaronix' exclusive light engine, our solar simulation equipment delivers a perfect and continuous artificial sunlight 24/7, allowing for accurate stability and performance assessments of solar cells at laboratory and industrial scale.

**INNOVATIVE SOLUTIONS FOR SOLAR PROFESSIONALS**

## LUMIXO, THE HEART OF OUR SOLAR TESTING EQUIPMENT

The need for a reliable and accurate light source for solar simulation and solar cell testing emerged during the early days of Solaronix. At the time, available light sources appeared to be unstable over time and led to biased photovoltaic measurements. With the same credo of autonomy and technological leadership, Solaronix developed a specific type of light source to overcome such limitations, the Lumixo light engine.

This genuine light source perfectly mimics sunlight, and presents an outstanding light stability over a long period of time. The unmatched features of the Lumixo light engine allow Solaronix to supply today's photovoltaic industry with accurate and dependable testing equipment.

In common discharge lamps, the light is emitted as an electrical arc between two electrodes. The extreme temperature of the discharge causes electrode breakdown after a few hundred hours of operation.

Alternatively, plasma lamps belong to a class of electrodeless light sources energized by radio frequency power. In the Lumixo light engine, a radio frequency system generates the power necessary to excite a plasma in a sealed electrode-less bulb. The bulb's lifetime itself is virtually infinite, allowing for the Lumixo's outstanding lifetime of 20,000 hours. The end-of-life time is actually dictated by



the rotating parts (fans, motors) and the radio frequency system, parts that can be easily replaced. Existing Solaronix solar simulators have over 63,000 hours of operation!

Proper documentation and remote assistance is provided to make Lumixo light engine service trouble free, directly on-site by the customer's team.

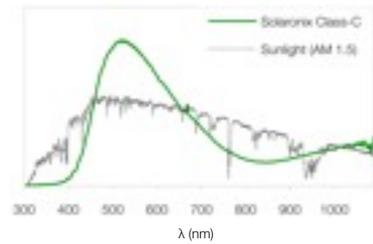
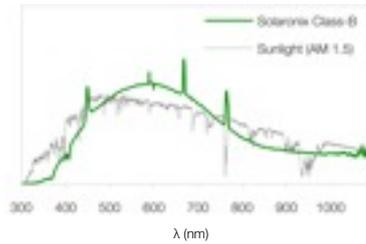
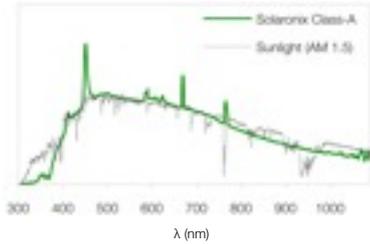
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## KEY FEATURES

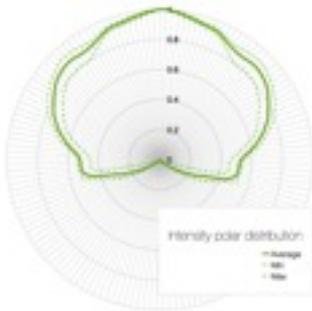
- outstanding lifetime of the light emitter (> 20,000 h), unprecedented for a 1 kW light source
- continuous illumination, especially well suited for monitoring thin film and other 3<sup>rd</sup> generation solar cells
- temporal light stability allowing an excellent measurement reproducibility over a long period of time
- smooth and continuous light spectrum with a sun-like wavelength distribution
- several spectra available, from energy-saving Class C [140 lm/W] to high-end Class A [70 lm/W]
- beautifully simple design, no filter needed
- adjustable illumination [30%-110%] to operate at partial sun equivalents
- safe: does not contain mercury, low pressure bulb
- reduced cost of ownership and streamlined maintenance

## LIGHT CHARACTERISTICS

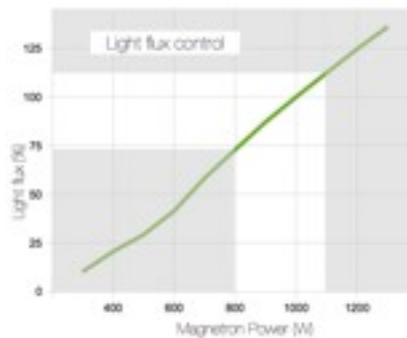
Class A, B or C spectrum  
[as per IEC 60904-9]



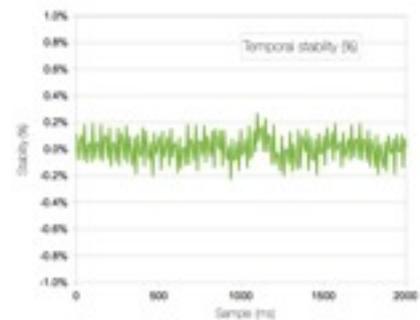
Quasi-uniform intensity distribution



Linear light flux control  
300-1100 W



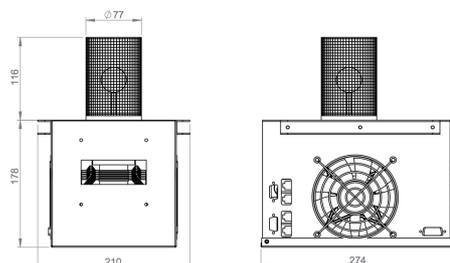
< 0.5% temporal stability  
in 'freeze' mode



## SPECIFICATIONS

Software control:	desktop application (RS-232) or web-based control (CAN server)
Radio frequency system power supply:	included
Lamp lifetime:	20,000 hours, serviceable
Warranty:	24 months
Electrical:	220-230 VAC, 50-60 Hz, max 1.5 kW
Weight:	10.5 kg (inc. power supply)

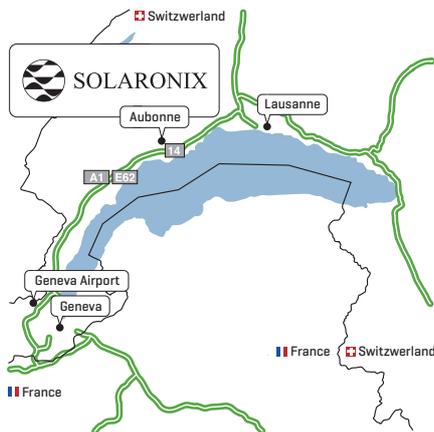
Dimensions:



Power supply (not shown):  
H 125 x W 240 x L 165 mm



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