

# litos

Advanced Solar Cell & LED Lifetime Stability  
Measurement System



16 / 32 Parallel  
Stressing  
Channels

4 Airtight  
Weathering  
Chambers

Accelerated  
Lifetime  
Testing

[www.fluxim.com](http://www.fluxim.com)



 swiss made software

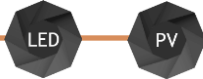
## Solar Cell & LED Stability Lifetime Measurement System

Litos is an advanced solar cell and LED stability lifetime measurement system. It has 16 / 32 parallel stressing channels distributed over 4 airtight weathering chambers. Each chamber has an individual temperature and illumination control.

The wide range of stress conditions inside a highly-controlled experimental environment and full automation make it a primary choice for researchers that want to understand the degradation behavior of *organic, perovskite, and quantum-dot solar cells and LEDs*.

### Litos Features

- Advanced lifetime analysis
- 16 / 32 Parallel channels
- Flexible sample design
- Temperature control
- 4 airtight chambers
- Fully automated
- LED and PV versions available
- Full capabilities for *ISOS protocols*
- Professional, user-friendly software



### Advantages

- Design customized to customer's sample layout (multiple layouts possible)
- Modular: connect several systems together
- Compatible with atmosphere-controlling equipment
- Automatic parameter extraction and plotting over time

### Technical Specification

Voltage range	-10 V to + 10 V
Maximum current	20 mA /channel
Full temperature control	0 – 125 °C
Sample size	Up to 2 inches
Light Intensity	Up to 10 suns

## For Solar Cells & Organic/Perovskite LEDs

Maximum power point (MPP) tracking, constant voltage/current

Independent *white and UV LED* illumination

>10 sun-equivalent illumination for accelerated lifetime testing

In-situ UV-vis absorption possible for bleaching detection (extra spectrometer module)

*In-situ PL and EL* measurements possible



Constant current, constant voltage

*Patented LED* accelerated aging and lifetime estimation integrated

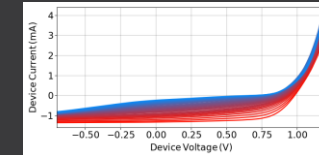
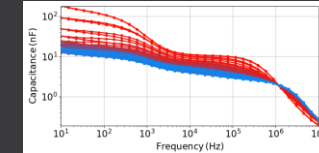
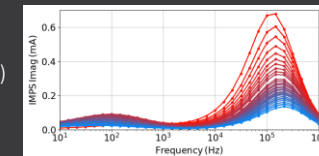
In-situ spectrometer available (extra module) for electro-luminescence measurements

Available for top and bottom emission LEDs



When paired with our platform *PaioS* repeated full characterization of the devices can be automatically performed including:

- Transient measurements (CELIV, DLTS, TPV, TPC, TEL...)
- Impedance spectroscopy / CV
- IMPS / IMVS (for solar cells)
- J-V-L curves
- All measurements as function of temperature



**litos**

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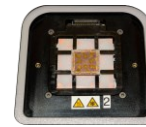
## Custom-Made Sample Holders

Litos sample holders are custom-made according to the specific layout of our customers. Multiple boards with different layouts can be delivered.

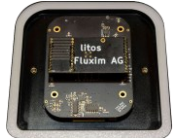
The board can be quickly replaced in the testing chamber by the user. Depending on the selected configuration, up to 8 solar cell or LED pixels can be stressed individually in each chamber (32 devices in total).



Peltier & LED arrays



8 Solar Cells

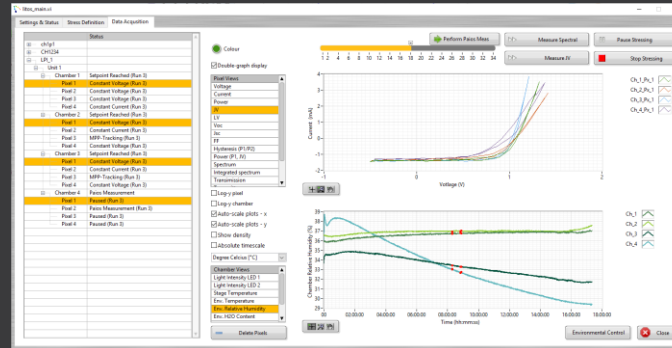


Electrode board on top of sample



Cover of single chamber

## Perform In-Depth Degradation Analysis



## Support

Full technical support is included with every purchase of Litos.

Contact us today to discuss how Litos can advance your R&D.

[hardware@fluxim.com](mailto:hardware@fluxim.com)



## Trusted by Academics & Industry



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