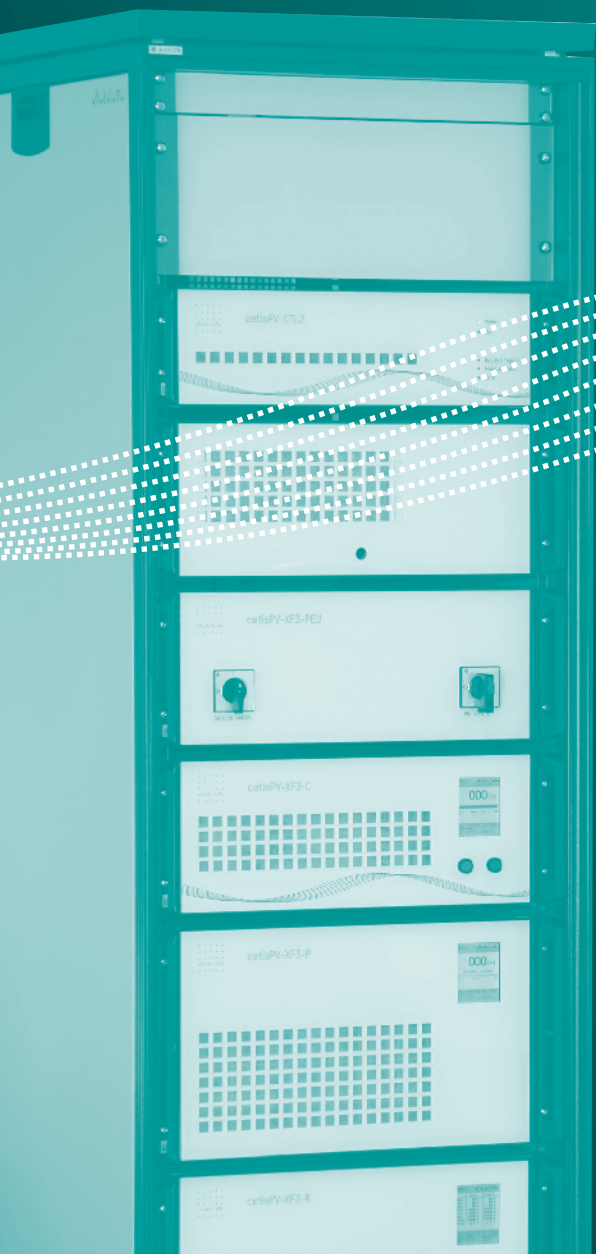


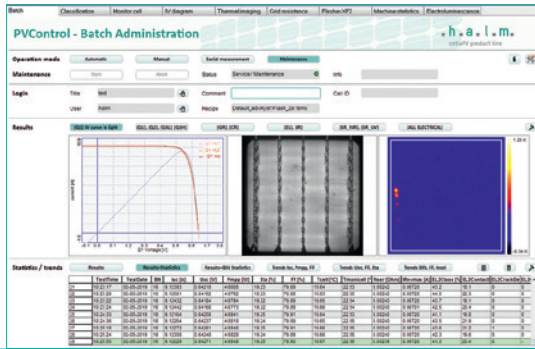


# cetisPV- IUCT-5000

High-speed class A+A+A+ xenon flasher  
and IV measurement system



cetisPV product line



# cetisPV- IUCT-5000

High-speed class A+A+A+  
xenon flasher and  
IV measurement system

The **cetisPV-IUCT-5000** cell tester combines best-in-class measurement with highest available throughput, thereby meeting all requirements of the present and future solar cell production.

**Performance** – Its highly stable light source provides illumination of up to 60 ms. In combination with the h.a.l.m. advanced hysteresis approach, this allows extremely precise and reproducible IV measurements of solar cells with highest efficiency and open-circuit voltages of up to 750 mV.

**Future-proof** – Due to its mature and modular design, the system can easily be complemented by further tools for quality and process control such as electro-luminescence or infrared imaging, inline spectral response, grid resistance and dark IV measurement.

**Cost of ownership** – The **cetisPV-IUCT-5000** is designed to operate with an extremely high throughput rate of 5,000 w/h and thereby enabling the customer to reduce capex and operating costs.

## Technical specifications

<b>Throughput</b>	up to 5,000 w/h at 40 ms
<b>Flash duration</b>	up to 60 ms
<b>Flash profiles</b>	single, double, triple level, ramp
<b>Repeatability (standard deviation)</b>	Isc and Voc < ±0.1 % / Pmpp and FF < ±0.15 %
<b>Measurement resolution</b>	< 0.004 % FSR (3 synchronous 16-bit channels for voltage, current and irradiance)
<b>Measurement accuracy</b>	< 0.05 % FSR for current and voltage measurements
<b>Voltage measurements ranges</b>	±1 V / ±2 V / ±4 V / ±10 V / ±20 V
<b>Current measurements ranges</b>	±2 A / ±4 A / ±10 A / ±20 A ±16 mA / ±32 mA / ±80 mA / ±160 mA or ±0.1 A / ±0.2 A / ±0.5 A / ±1 A
<b>Electronic load</b>	active 4-quadrant load
<b>Spectral match*</b>	0.88 – 1.12 (class A 0.75 – 1.25)
<b>Non-uniformity of irradiance*</b>	< 1 % (class A ≤ 2 %)
<b>Short-term instability of irradiance*</b>	< 0.05 % (class A ≤ 0.5 %)
<b>Long-term instability of irradiance*</b>	< 0.8 % (class A ≤ 2 %)
<b>Lamp lifetime (guaranteed/typical)</b>	500,000/3,000,000 flashes
<b>Advanced measurements and evaluations</b>	multiple series and shunt resistance evaluations methods, single-flash advanced hysteresis optional: 2-diode analysis, SunsVoc
<b>Optional packages</b>	EL imaging, IR imaging, spectral response, grid resistance

\*IEC 60904-9 Ed. 2      Technical data are subject to change without notice.

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