

Fast, Cost-Effective PL Imaging for WCT-120 Series Instruments

Unlock powerful photoluminescence (PL) imaging capabilities without the cost or complexity of a standalone system. This easy-to-integrate add-on mounts directly onto the WCT filter tray, enabling seamless PL imaging as part of your existing WCT lifetime measurement workflow. No extra footprint. No extra hassle.

Key Benefits

- **Large Area Coverage:** Capture full-wafer (or cell) PL images up to 230mm x 230mm, ideal for all wafer types, including half-cut formats.
- **High-Quality Imaging at Low Cost:** Generate sharp PL images using your current WCT setup – enhancing diagnostic capabilities while minimizing new equipment costs.
- **Fast Results:** Complete wafer characterization in seconds, accelerating throughput and enabling rapid feedback for process optimization.
- **Compatibility with existing setups:** Fully compatible with WCT-120, WCT-120MX, WCT-120TS, and SunsVocMX instruments. Controlled entirely through the Sinton Instruments Lifetime software package, ensuring a unified and intuitive user experience
- **Advanced Analysis Capabilities:** PL images are calibrated and analyzed to deliver iVoc, effective lifetime, J_{0e} , and bulk lifetime maps on wafers. This delivers deeper insight into material quality and device performance.

Why PL Imaging Matters

- **Detect Subtle Nonuniformities:** Visualize spatial variations in material quality, diffusion profiles, and defect distribution that standard lifetime measurements may miss.
- **Identify Process Anomalies Early:** Spot issues like emitter irregularities, contamination, or handling tool marks before they affect downstream yield or performance
- **Strengthen R&D and Production Insight:** Whether refining new cell designs or monitoring batch consistency, PL imaging adds a critical visual dimension to your analysis toolkit.

