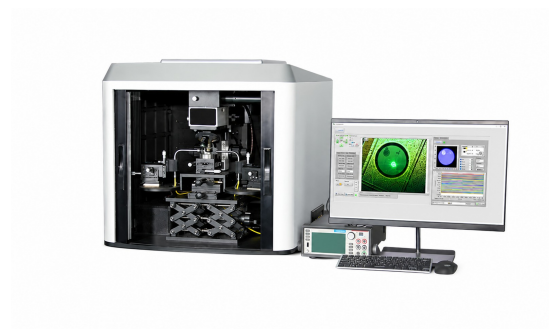


DSR500-LBIC

DSR500-LBIC Micro-Photocurrent Imaging System

DSR500-LBIC uses a galvanometer-scanned microscope to record local photocurrent and I-V curves while the sample remains stationary. The standard 20× objective provides a 260 × 200 µm scan field, with selectable scan steps down to 0.2 µm.

Best for: Photocurrent imaging of microdevices, two-dimensional materials and semiconductor junctions.

**260 × 200 µm**

Scan field at 20×

0.2 µm

Minimum scan step

2 µm

Laser spot

< 1 µm

Position repeatability

Overview

DSR500-LBIC scans the focused laser across a stationary sample and associates each position with the measured current. A visible sample image is used to select the region of interest.

Current maps, local I-V curves, contour plots and three-dimensional displays reveal spatial changes in carrier generation and collection. Scan step is a positioning setting; it is distinct from the optical spot size.

Features

- Stationary-sample mapping with galvanometer beam scanning
- Current maps at fixed bias and local I-V sweeps
- Selectable regions, line profiles and TXT / Excel export

Applications

- Two-dimensional materials and nanostructures
- Photodetector pixel and junction analysis
- Local photovoltaic response and interface studies

Specifications and configuration

Microscope and scanning	
Standard excitation	532 nm laser; 405 nm and 635 nm options
Standard objective	20×; working distance 7.5 mm
Scan field	260 × 200 µm with the 20× objective
Scan step	0.2–30 µm
Laser spot	2 µm
Position repeatability	< 1 µm
Sample-stage travel	25 mm; 5 µm positioning resolution

Acquisition	
Standard source meter	2450; omitted in DSR500-LBIC-RDB
Current range	1 nA–1 A
Dark noise	50 pA
Current resolution	20 fA
Accuracy	0.03%
Optional spectral response	200–1100 nm; extension to 2500 nm available

Available configurations

Model	Configuration
DSR500-LBIC	Includes the 2450 source meter.
DSR500-LBIC-RDB	Source meter is not included.

Configuration and quotation

Share the sample size, wavelength range and required measurements to select the source, optics and acquisition modules.

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www.precisometer.com/spectroscopy/photoelectric-testing/dsr500-lbic