

DSR300

DSR300 Microdevice Spectral Response System

DSR300 is a microscope-based platform for spectral responsivity, external quantum efficiency, photocurrent mapping and response-rate measurements. A 40 μm probe spot targets small detector areas and microstructured devices.

Best for: Small-area photodetectors, nanomaterials and microscopic photoelectric devices.

**40 μm**

Probe spot

SR & EQE

Measurements

LBIC mapping

Spatial testing

200 ms

I-t resolution

Overview

DSR300 combines spectral scanning, photocurrent mapping and temporal measurements around a microscope and adjustable probe station. The small probe spot supports absolute responsivity measurements on detector areas of approximately hundreds of micrometres.

Source options include xenon, halogen, semiconductor lasers, picosecond lasers and supercontinuum sources. Wavelength coverage and response-rate capability depend on the selected optical and acquisition configuration.

Features

- Three-dimensional sample and probe adjustment
- Monochromatic and variable-power I-V measurements
- I-t sweeps under different irradiance and bias conditions

Applications

- Micro- and nanoscale photodetector development
- Two-dimensional materials and semiconductor devices
- Spatial uniformity, linearity and response-rate measurements

Specifications and configuration

Measurement functions	
Probe spot	40 μm
Spectral measurements	Absolute spectral responsivity and external quantum efficiency
Electrical measurements	Monochromatic / variable-power I–V; I–t under optical and electrical bias
Published I–t resolution	200 ms; separate response-rate tests depend on configuration
Mapping	LBIC / photocurrent mapping
Sample positioning	Three-dimensional adjustable probe station
Sources	Xenon, halogen, supercontinuum, picosecond and semiconductor laser options

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/dsr300