

DSR900

DSR900 Camera Characterisation System

DSR900 automates camera and imaging-sensor characterisation with uniform monochromatic illumination, a dark enclosure and analysis software. Supports EMVA 1288 measurement workflows for visible and near-infrared cameras.

Best for: Measuring camera noise, linearity, dynamic range, responsivity and pixel non-uniformity.



CCD & CMOS

Camera types

EMVA 1288

Workflow

200 mm diameter

Monochromatic sphere

$\geq 2000 \times 1500 \times 1450$ mm

Dark enclosure

Overview

DSR900 integrates a tunable monochromatic source, uniform broadband illumination and a dark enclosure with motorised positioning. Automated acquisition and reports support repeatable camera and sensor comparisons.

The monochromator is specified over 200-2500 nm, while the monochromatic integrating sphere is specified for 250-2500 nm. Usable system coverage depends on all selected optical components and the camera response.

Features

- Automated image capture, processing and test reports
- Temporal and fixed-pattern noise, linearity and dynamic range
- Non-uniformity correction and defective-pixel location

Applications

- CCD and CMOS camera evaluation
- Visible and near-infrared sensor development
- Camera performance comparison and calibration

Specifications and configuration

Monochromatic illumination	
Source	150 W xenon lamp
Source and monochromator range	200–2500 nm
Monochromator focal length	320 mm; f/4.2
Resolution	0.08 nm with a 1200 lines/mm grating
Adjustable bandwidth	0.5–12 nm
Integrating sphere	200 mm internal diameter; coating range 250–2500 nm
Sphere port	≥ 10 mm

Enclosure and analysis	
Dark enclosure	At least 2000 × 1500 × 1450 mm
Positioning	Optical-axis travel > 100 mm; vertical travel 100 mm
Broadband field uniformity	≤ 1% within a 100 mm diameter field
Analysis	Noise, responsivity, detectivity, dynamic range, linearity, non-uniformity and defective pixels

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/dsr900