



hsg labs® | 4P



PRODUCT NAME:

HSG Labs 4P

The HSG Labs 4P is a surface measurement system combining spectral and spatial analysis for calibration and evaluation of RGB laser projectors and LED display systems. This integrated device incorporates a high-resolution spectroradiometer and 20-megapixel imaging sensor, enabling pixel-level measurement analysis and spectral characterization in a single unit.

Features and Benefits

- Portable with integrated battery
- One point and 2D matrix special luminance measurements with Spectro colorimeter and 20 Mpx camera
- Single shot SD and HDR contrast measurement
- Programmable for full automatic operations
- Remote API, SNMP integrating for 3rd party support
 - Industrial integration and calibration with uniformity analysis
- Remote assistance for premium A/V or private cinema
 - 24hr monitoring instant 'onsite' availability to the customer
 - 0hr service level agreements
- Calibration of home xenon and laser projectors LED screens, monitors or televisions
- Custom reporting and data export option via 3rd party integration, SNMP or PDF

Digital Cinema

- Macbeth IRC color generation
- DLP convergence measurements
- Lens control (focus, zoom and position alignment)
- Light source control (xenon, RB, RGB phosphor, hybrid phosphor)
- Audio validation and analysis (ATMOS)

LED Screens

- Dead pixel analysis
- Uniformity checks
- Calibration and color matching

Technical Overview

Spectral range	380nm to 780nm Photometric CIE values
Spectral bandwidth	FWHM: 2nm (1nm HiRes version available)
Pixel Resolution	0.15 nm/pixel
Color accuracy (Illuminant A)	±0.0015 for CIE 1931 (xy)
Calibration*	NIST; CIE Illuminant A and custom Illuminant
Repeatability	≤1%
Luminance range	0.005 to 200,000 cd/m ²
Luminance accuracy	±1%
Measuring values	cd/m or fL, Y, CCT/xy/u'v'/uv/wavelength peak
Measuring aperture	2° (FOV)
Power	230/110V Optional internal battery with 4hr runtime
Dimensions	11.4" x 7.5" x 4.7"/290 x 190 x 110mm

*Calibration recommended every 1 year, dependent on requirements
Specifications are subject to change without notice