CDS-800
Mini CMOS Array Spectrometer

Comprehensive spectral measurements in fractions of a second

Accurate
The highly sensitive CDS-800 Mini CMOS Array Spectrometer offers low noise and a wavelength range from 240 to 1100 nm. When coupled with a Labsphere integrating sphere, the spectrometer avoids the inherent photometric errors associated with fiter-based photometers; data is accurate even for narrow-band light sources such as LEDs, solid state lighting, fluorescent lamps, and discharge lamps. In production, these systems can increase the throughput of quality assurance testing which facilitates improved statistical process control for higher manufacturing consistency and greater product quality.

Fast
Labsphere's CDS Mini CMOS Array Spectrometer is a multi-channel spectral analyzer designed for real-time spectral analysis. Instantaneous spectral acquisition provides the radiometric, photometric, and color characteristics of the device under test (DUT). Fast results help to increase the rate of product development, decrease the time to market, and reduce development costs.

Easy to use
The CDS Spectrometer easily connects to a PC via a USB-2 port and uses a fiber optic cable to connect to the optical head, enabling the remote positioning of the spectrometer. Windows® software guides the user through testing procedures making complex spectral measurements simple while still meeting the needs of experienced researchers.

Value:

- Wide spectral range
- < 2.0 nm spectral resolution
- Wavelength accuracy <0.5 nm
- Fast CMOS array detector
- 3 m fiber optic input cable

Measure:

- Packaged LEDs
- Clustered LEDs
- Miniature lamps
- Entertainment lighting
- Automotive lighting

Ordering Information

Model Number	Order Number
CDS-800 CMOS Array Spectrometer	**AS-81080-000**

- Labsphere's CDS CMOS Array Spectrometer
- 3 meter fiber optic input
- 2 meter USB-2 cable

Specifications

Model Number	**CDS-800**
Wavelength Range:	240 - 1100 nm
Signal-to-Noise Ratio:	330:1 (at full signal)
A/D Resolution:	6 MHz
Dark Noise: (correctable)	16 RMS counts
Dynamic Range:	3330
Integration Time:	30 µs to 40 s*
Stray Light:	0.2 - 1%
Electronics	
Power:	USB, 500 mA
Computer Operating Systems:	Windows
Computer Interfaces:	USB 2.0
Physical	
Dimensions:	95 mm x 68 mm x 70 mm
Weight:	175 grams
Detector	
Detector:	HAM S11639
Detector Range:	200 - 1100 nm
Pixels:	2048 pixels
Pixel Size:	14 µm x 200 µm

Compatible with:

Integral® Application Software
HELIOSense Application Software
Spectra-UT Ultra Tunable Spectral Calibration Sources
Spectra-FT Fine Tunable Spectral Calibration Sources
Illumia®Plus2 Systems
HELIOS®Plus Systems

*Refer to Labsphere's Systems Datasheets for application-specific integration times or radiometric and photometric measurement ranges.