

Choose the spectrometer that's right for you



CDS-600/610

Wide spectral range

Fast CCD array detector

Compact size

Ideal for QC and manufacturing applications

High sensitivity



CDS-1100/2100

Fast, low noise; TE cooled back-thinned CCD array detector

Shutter for dark measurements in real time

Hardware triggering capability

Exceptional stability at long exposure time

High dynamic range



CDS-3020/3030

Exceptional measurement sensitivity

Inbuilt filter wheel with ND filters provides excellent dynamic range

Low stray light

High speed

Easily synchronized with other devices

Spectrometer Specifications

Spectrometer	CDS 600	CDS 610	CDS 1100	CDS 2100	CDS 3020	CDS 3030
Detector:	2048 element Linear CCD	2048 element Linear CCD	1044 x 64 CCD (back thinned)	1044 x 64 CCD (back thinned)	1044 x 128 CCD (back thinned)	1044 x 128 CCD (back thinned)
Spectral Range: (spectrograph)	200 - 850 nm	350 - 1100 nm	250 - 850 nm	350 - 1100 nm	350 - 830 nm	350 - 1100 nm
Resolution: (FWHM)	1.5 nm	1.5 nm	1.5 nm	1.5 nm	3.0 nm	3.7 nm
Integration Time:	1 ms - 5 sec	1 ms - 5 sec	8 ms - 15 min	8 ms - 15 min	5 ms - 20 sec	5 ms - 20 sec
Cooling:	n/a	n/a	-10 ± 0.05°C	-10 ± 0.05°C	-10 ± 0.05°C	-10 ± 0.05°C
Linearity:	± 0.13%	± 0.13%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Wavelength Accuracy:	< ± 0.3 nm	< ± 0.3 nm	< ± 0.3 nm	< ± 0.3 nm	< ± 0.3 nm	< ± 0.3 nm
Average % Noise on 100% Line:	0.20%	0.20%	0.05%	0.05%	0.18%	0.18%
Stray Light: (Y-50 filter)	1.66%	1.66%	1.87%	1.87%	0.97%	0.97%
Stray Light LED/Laser:	2.6E-5 from 450-550 nm w/633 nm laser	1.8E-5 from 450-550 nm w/633 nm laser	1.8E-5 from 450-550 nm w/633 nm laser	1.2E-5 from 450-550 nm w/633 nm laser	1.8E-5 from 450-550 nm w/633 nm laser	
Optical Input:	600 um, 3 m long (SMA Connection)	600 um, 3 m long (SMA Connection)	600 um, 3 m long (SMA Connection)	600 um, 3 m long (SMA Connection)	1000um, 2 m long, ferrule connection	1000um, 2 m long, ferrule connection
Measurement Dynamic Range:	15K	15K	475K	475K	1.6M	1.6M
x, y Chromaticity Accuracy:	<0.001 for x, y	<0.001 for x, y	<0.001 for x, y	<0.001 for x, y	<0.001 for x, y	<0.001 for x, y
Mechanical Shutter:	No	No	Yes	Yes	Yes	Yes
AD Converter:	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit
PC Interface:	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Trigger: hardware	No	No	Yes	Yes	Yes	Yes
Trigger: software	Yes	Yes	Yes	Yes	Yes	Yes
OD Filters:	No	No	No	No	Yes: ND1 & ND2	Yes: ND1 & ND2
Shutter:	No	No	Yes	Yes	Yes	Yes

NOTES:

1. Values above are the noise equivalent power in W/nm or lumens for the different wavelength ranges cited. They were all taken with a 5W lamp, 10" sphere and 10 ms integration time.