

3.3.4.1.3 Large Format USB Silicon CCD Cameras

LT665

Features

- Large 1" imager format
- High resolution
- High speed
- 54dB true dynamic resolution



L11059

Features

- 35mm x 24mm imager format
- Highest resolution
- Programmable high speed electronic shutter
- 59dB true dynamic resolution



Comes with 3 ND filters: (ND1, ND2, ND3)
ND3 mounted in camera

Model	LT665	L11059		
Format	1"	35mm		
Wavelengths ⁽¹⁾	190 - 1100nm	190 - 1100nm		
Active area	12.5mm x 10mm	35mm x 24mm		
Beam sizes	46µm - 9.9mm	90µm - 24mm		
Pixel spacing	4.54µm x 4.54µm	9.0µm x 9.0µm		
Number of effective pixels	2752 x 2192	4008 x 2672 ⁽²⁾		
Dynamic range	54 dB	59 dB		
Linearity with power	±1%	±1%		
Accuracy of beam width	±2%	±2%		
Frame rates in 12 bit mode ⁽³⁾	27 fps at full resolution	3.1 fps at full resolution		
Shutter duration	31µs to multiple frames	10µs to multiple frame		
Gain control	0.8 dB to 56 dB	0.8 dB to 56 dB		
Trigger	Hardware/Software trigger & strobe out	Supports both trigger & strobe out		
Photodiode trigger	Si response: SP90408	Si response: SP90408		
Saturation intensity ⁽⁴⁾	14µW/cm ²	160µW/cm ²		
Lowest measurable signal ⁽⁴⁾	0.3nW/cm ²	0.17nW/cm ²		
Damage threshold ⁽⁵⁾	50W/cm ² / 1J/cm ² with all filters installed for < 100ns pulse width	0.15mW/cm ²		
Dimensions	43mm x 43mm x 65mm	83 mm x 76mm x 128mm		
CCD recess	17.5mm	17.3mm		
Image quality at 1064nm	Pulsed with trigger sync - excellent Pulsed with video trigger - good CW - good	Pulsed with trigger sync - excellent Pulsed with video trigger - good CW - good		
Operation mode	Quad Tap interline transfer CCD			
PC interface	USB 3.0	USB 2.0		
OS supported	Windows 7 (64) and Windows 10			
Compliance	CE, UKCA, China RoHS			
Ordering Information				
Supported software	Item	P/N	Item	P/N
BeamGage Professional	BGP-USB3-LT665	SP90378 ⁽⁶⁾	BGP-USB-L11059	SP90320 ⁽⁷⁾
BeamGage Standard	BGS-USB3-LT665	SP90377 ⁽⁶⁾	N/A	N/A

Accessories

LBS-300 to L11059 Adapter

SP90571

LBS-400 to L11059 Adapter

SP90439

Notes:

- (1) The camera's natural response is from 340nm through 1100nm. To measure effectively below 340nm, please make use of one of our UV converters. Otherwise the sensitivity is too low and the measurement accuracy may degrade.
- (2) Actual active aperture is 3968 x 2624.
- (3) Highly dependent on PC processor and graphics adapter performance.
- (4) Camera set to full resolution at maximum frame rate at 633nm CW wavelength. Camera set to minimum useful gain and 1ms exposure time for saturation test and maximum useful gain and 35ms exposure time for lowest signal test.
- (5) This is the damage threshold of the filter glass of the filters. Assuming all filters mounted with ND1 (red housing) filter in the front. Distortion of the beam may occur with average power densities of 5W/cm² for beam size 5mm, 10W/cm² for 2mm beam and >30W/cm² for 1mm beam.
- (6) Comes with USB 3.0 cable, Power with Trigger cable and 3 ND filters.
- (7) Comes with USB A-B cable, Trigger cable and 3 ND filters.

