

Item	Specification		
Model	SP907	SP928	SP300
Application	1/1.8" format	1/1.8" format	1/1.8" format
Spectral Response	190 - 1100nm ⁽²⁾	190 - 1100nm ⁽²⁾	190 - 1100nm ⁽²⁾
Active Area	7.1mm x 5.3mm	7.1mm x 5.3mm	7.1mm x 5.3mm
Pixel spacing	7.38µm	3.69µm	3.69µm
Number of effective pixels	964 x 724	1928 x 1448	1928 x 1448
Minimum system dynamic range	56 dB	56 dB	56 dB
Linearity with Power	±1%	±1%	±1%
Accuracy of beam width	±2%	±2%	±2%
Frame rates in 12 bit mode ⁽⁴⁾	23 fps at full resolution	13 fps at full resolution	26 fps at full resolution
Shutter duration	30µs to multiple frames	30µs to multiple frames	30µs to multiple frames
Gain control	0 dB to 24 dB	0 dB to 24 dB	0 dB to 24 dB
Trigger	Hardware/Software trigger & strobe out	Hardware/Software trigger & strobe out	Hardware/Software trigger & strobe out
Photodiode trigger	N/A	N/A	N/A
Saturation intensity ⁽¹⁾	0.97µW/cm ²	0.97µW/cm ²	0.97µW/cm ²
Lowest measurable signal ⁽¹⁾	1.2nW/cm ²	1.2nW/cm ²	1.2nW/cm ²
Damage threshold	50W/cm ² / 0.1J/cm ² with all filters installed for < 100ns pulse width ⁽³⁾		
Dimensions	48 mm x 44 mm x 20.2 mm	48 mm x 44 mm x 20.2 mm	44 mm x 29 mm x 58 mm
CCD recess	4.5 mm	4.5 mm	17.5 mm
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	Pulsed with trigger sync - excellent Pulsed with video trigger - good CW - good
Operation mode	Interline transfer CCD	Interline transfer CCD	Double tap interline transfer CCD
Software supported	BeamGage STD or PRO	BeamGage STD or PRO	BeamGage STD or PRO
PC interface	USB 3.0	USB 3.0	USB 3.0
OS Supported	Windows 7 (64) and Windows 10		

Notes:

(1) Camera set to full resolution at maximum frame rate and exposure times, running CW at 632.8nm wavelength. Camera set to minimum useful gain for saturation test and maximum useful gain for lowest signal test.

(2) Camera may be useable for wavelengths below 350nm but sensitivity is low and detector deterioration may occur. Therefore UV image converter is recommended. Although our silicon cameras have shown response out to 1320nm it can cause significant blooming which could lead to significant errors of beam width measurement. We would suggest our XC130 InGaAs camera for these wavelengths to give the best measurements.

(3) 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 as low as 5W/cm².

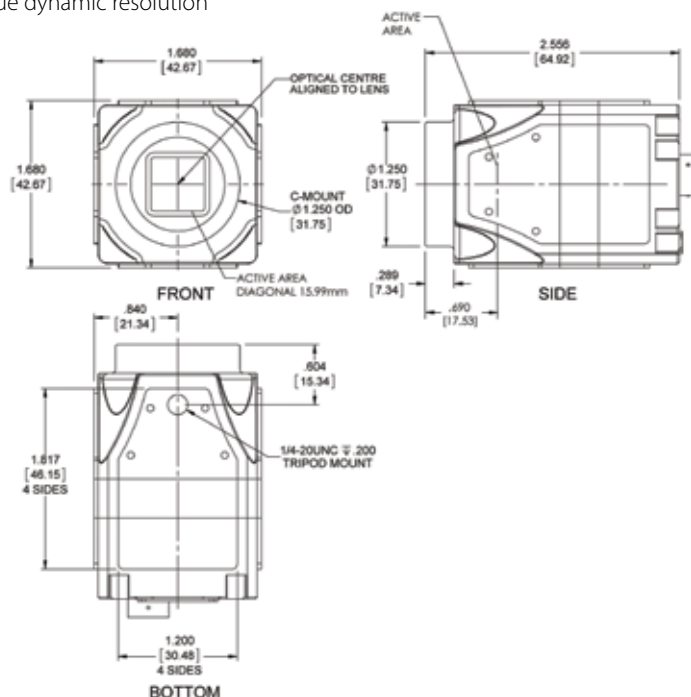
(4) Highly dependent on PC processor and graphics adapter performance.

3.3.1.5.2 Large Format 190-1100nm USB Silicon CCD Cameras

LT665

Features

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



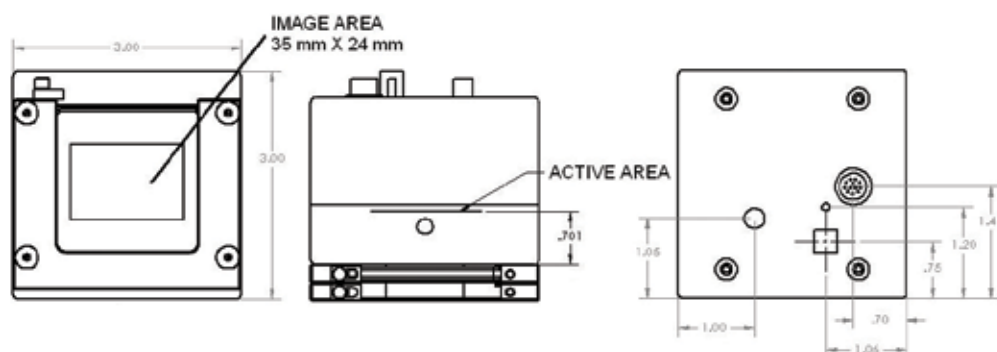
L11059

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



Item	Specification	
Model	LT665	L11059
Application	1" format	35mm format
Spectral Response	190 - 1100nm ⁽²⁾	190 - 1100nm ⁽²⁾
Active Area	12.5mm x 10mm	35mm x 24mm
Pixel spacing	4.54µm x 4.54µm	9.0µm x 9.0µm
Number of effective pixels	2752 x 2192	4008 x 2672
Minimum system dynamic range	54 dB	59 dB
Linearity with Power	±1%	±1%
Accuracy of beam width	±2%	±2%
Frame rates in 12 bit mode ⁽⁴⁾	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	N/A	N/A
Saturation intensity ⁽¹⁾	1.3µW/cm ²	0.15µW/cm ²
Lowest measurable signal ⁽¹⁾	0.3nW/cm ²	0.17nW/cm ²
Damage threshold	50W/cm ² / 0.1J/cm ² with all filters installed for < 100ns pulse width ⁽³⁾	0.15mW/cm ²
Dimensions	43 mm x 43 mm x 65 mm	83 mm x 76 mm x 128 mm
CCD recess	17.5mm	18.8mm
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	
Software supported	BeamGage STD and PRO	BeamGage PRO
PC interface	USB 3.0	USB 2.0
OS Supported	Windows 7 (64) and Windows 10	

Notes:

- (1) Camera set to full resolution at maximum frame rate and exposure times, running CW at 632.8nm wavelength. Camera set to minimum useful gain for saturation test and maximum useful gain for lowest signal test.
- (2) Camera may be useable for wavelengths below 350nm but sensitivity is low and detector deterioration may occur. Therefore UV image converter is recommended. Although our silicon cameras have shown response out to 1320nm it can cause significant blooming which could lead to significant errors of beam width measurement. We would suggest our XC130 InGaAs camera for these wavelengths to give the best measurements.
- (3) 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 as low as 5W/cm².
- (4) Highly dependent on PC processor and graphics adapter performance.