## 3.3.4.2.1 Phosphor Coated CCD Cameras For NIR Response

## **Features**

- 1440-1605nm Wavelengths
- NIR Telecom mode field analysis
- NIR Laser beam analysis

## **Available Models**

USB models: SP920s-1550 Large Format: LT665-1550



Model	SP920s-1550		LT665-1550	
Application	NIR wavelengths, 1/1.8" format, low resolution		NIR wavelengths, 1" format, higher resolution	
Wavelengths	1440 - 1605nm		1440 - 1605nm	
Active area	7.1mm x 5.3mm		12.5mm x 10mm	
Beam sizes (1)	600μm - 5.3mm		600μm - 9.9mm	
Pixel spacing (2)	4.4μm x 4.4μm		4.54µm x 4.54µm	
Number of effective pixels	1624 x 1224		2752 x 2192	
Dynamic range (3)	~30 dB		~30 dB	
Linearity with power	±5%		±5%	
Accuracy of beam width	±5%		±5%	
Frame rates in 12 bit mode (4)	15 fps at full resolution		27 fps at full resolution	
Shutter duration	70µs to multiple frames		31µs to multiple frames	
Gain control	0 dB to 24 dB		0.8 dB to 56 dB	
Trigger	Supports both trigger and strobe out		Supports both trigger and strobe out	
Photodiode trigger (Optional) (5)	InGaAs response: SP90409		InGaAs response: SP90409	
Saturation intensity	7mW/cm <sup>2</sup> at 1550nm	The state of the s		
owest measurable signal	50μW/cm²	The second second		
Damage threshold	50W/cm <sup>2</sup> / 1J/cm <sup>2</sup> with all filters installed	ed for < 100ns pulse	width (6)	
Ambient operating temperature	0 - 50° C 0 - 50° C. Recommended to connect to heat sink			
Dimensions	29mm x 29mm x 29.5mm 43mm x 43mm x 65mm			
CCD recess	4.5mm		17.5mm	
Operation mode	Interline transfer CCD	Quad Tap interline transfer CCD		
PC interface	USB 3.0			
OS supported	Windows 7 (64) and Windows 10	OKA SE		
Compliance	CE, UKCA, China RoHS			
Ordering Information		A STATE OF THE PARTY OF THE PAR		
Supported software	Item	P/N	Item	P/N
BeamGage Professional	BGP-USB3-SP920s-1550	SP90562 (7)	BGP-USB3-LT665-1550	SP90385 (8)
BeamGage Standard	BGS-USB3-SP920s-1550	SP90561 (7)	BGS-USB3-LT665-1550	SP90384 (8)

- Ige Standard BGS-USB3-SP920s-1550 BP9561 BGS-USB3-L1665-1550 SP90384 (a) [1] The maximal beam size refers to "Flat-top" laser beams. For Gaussian beams, reduce maximum beam size by 1/3. (b) Despite the small pixel size, the spatial resolution will not exceed 50µm due to diffusion of the light by the phosphor coating. (c) Signal to noise ratio is degraded due to the gamma of the phosphor's response. Averaging or summing of up to 256 frames improves dynamic range by up to 16x = +24 dB. (d) In normal (non-shuttered) camera operation, the frame rate is the fastest rate at which the laser may pulse and the camera can still separate one pulse from the next. With electronic shutter operation, higher rate laser pulses can be split out by matching the laser repetition to the shutter speed. (c) For more information please see "Optical Camera Trigger" catalog page. (c) 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. (7) Comes with USB 3.0 cable, Trigger cable and 3 ND filters. (8) Comes with USB 3.0 cable, Power with Trigger cable and 3 ND filters.

## SP920s-1550 LT665 - 1550 1/4-20 ¥ 6.0 STATUS LED GPIO CONNECTOR CS-MOUNT -ACTIVE AREA: 7.1 X 5.4 2X M2X0.4 ₹ 2