

Cameras Specifications

Model	SP932U	LT665
Format	1/1.8"	1"
Wavelengths ⁽¹⁾	190 - 1100nm	190 - 1100nm
Active Area	7.06mm x 5.3mm	12.5mm x 10mm
Beam sizes	34.5µm - 5.3mm	46µm - 9.9mm
Pixel spacing	3.45µm x 3.45µm	4.54µm x 4.54µm
Number of effective pixels	2048 x 1536	2752 x 2192
Dynamic range	72 dB	54 dB
Linearity with Power	±1%	±1%
Accuracy of beam width	±2%	±2%
Frame rates in 12 bit mode ⁽²⁾	24 fps at full resolution	27 fps at full resolution
Shutter duration	25µs to 2000ms	31µs to multiple frames
Gain control	1.46 dB to 256 dB	0.8 dB to 56 dB
Trigger	Hardware/Software trigger & strobe out	Hardware/Software trigger & strobe out
Photodiode trigger (Optional) ⁽³⁾	Si response: SP90408	Si response: SP90408
Saturation intensity ⁽⁴⁾	32µW/cm ² at 632nm, 500µW/cm ² at 1064nm	14µW/cm ²
Lowest measurable signal ⁽⁴⁾	0.2nW/cm ²	0.3nW/cm ²
Damage threshold ⁽⁵⁾	50W/cm ² / 1J/cm ² with all filters installed for < 100ns pulse width	50W/cm ² / 1J/cm ² with all filters installed for < 100ns pulse width
Dimensions	45mm x 45mm x 22.5mm	43mm x 43mm x 65mm
Imager recess	4.5mm	17.5mm
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	CMOS, Global shutter	Quad Tap interline transfer CCD
PC interface	USB 3.0	USB 3.0
OS Supported	Windows 7 (64) and Windows 10	Windows 7 (64) and Windows 10
Compliance	CE, UKCA, China RoHS	CE, UKCA, China RoHS

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) Highly dependent on PC processor and graphics adapter performance.
- (3) For more information please see "Optical Camera Trigger" catalog page.
- (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.

LBS -300s Specifications

Model	LBS-300s-UV	LBS-300s-VIS	LBS-300s-NIR	LBS-300HP-NIR	LBS-300s-BB
Wavelengths ⁽¹⁾	266-355nm	400-950nm	950-1800nm	1000-1100nm	190-2500nm
Wedge Material	UVFS	UVFS	UVFS	UVFS	UVFS
Wedge Coating	A/R ≤1%	AR ≤1%	AR ≤1%	AR ≤0.1% special surface	No coating, 4% reflection
Clear aperture	17.5mm	17.5mm	17.5mm	15mm	17.5mm
Reflection ⁽¹⁾⁽²⁾	0.01%	0.01%	0.01%	<0.0001% (1/10 ⁶)	0.16%
Wedge ND value, each	ND ≥2	ND ≥2	ND ≥2	ND ≥3	ND ~1.3
Maximum allowable input to wedge	1MW/cm ² 5 J/cm ²	1MW/cm ² 5 J/cm ²	1MW/cm ² 5 J/cm ²	15MW/cm ² , 10J/cm ² at beam splitter	10MW/cm ² 20 J/cm ²
ND Filters	Inconel	Bulk ND	Bulk ND	Bulk ND	Combination of Inconel and Bulk ND
ND Values, nominal	0.3, 0.7, 1.0, 2.0, 3.0, 4.0 (Blue holders)	0.3, 0.7, 1.0, 2.0, 3.0, 4.0 (Green holders)	0.4, 0.8, 1.0, 2.0, 3.0, 4.0 (Red holders)	0.4, 0.8, 1.0, 2.0, 3.0, 4.0 (Red holders)	10 filters UV, VIS and NIR
Filter Slides	3	3	3	3	5
Maximum allowable input to filter ⁽³⁾	100 W/cm ² CW 20mJ/cm ² , 10ns pulse	50 W/cm ² 1J/cm ² , 10ns pulse	50 W/cm ² 1J/cm ² , 10ns pulse	50 W/cm ² 1J/cm ² , 10ns pulse	See UV, VIS and NIR specifications

Notes:

- (1) The Wavelengths and Reflection refer to Wedges of LBS-300s Assembly used in FSA unit. The standard FSA operating wavelengths is limited by SP932U camera 300-1100nm, In case extending spectral region is required, contact your Ophir representative.
- (2) For reflectance Spectra see LBS-300 User Note.
- (3) This is the damage threshold of the filter glass of the filters. 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

Ordering Information

Model	SP932U		LT665	
	Item	P/N	Item	P/N
LBS-300s-UV	FSA-UV-SP932U	SP90614	BGP-LBS-300s-UV-CAL-LT665	SP90481
LBS-300s-VIS	FSA-VIS-SP932U	SP90615	BGP-LBS-300s-VIS-CAL-LT665	SP90482
LBS-300s-NIR	FSA-NIR-SP932U	SP90616	BGP-LBS-300s-NIR-CAL-LT665	SP90483
LBS-300s-BB	FSA-BB-SP932U	SP90617	BGP-LBS-300s-BB-CAL-LT665	SP90484
LBS-300HP-NIR	FSA-HP-NIR-SP932U	SP90603		

Note: Comes with BeamGage Professional software license, NIST/ National Lab traceable calibrated path length from top of unit to CCD array, USB cable and 3 ND filters.