

SHSCam – SWIR sensor head overview

Type	SWIR-350-GE	SWIR-210-GE
Sensor Technology	InGaAs	InGaAs
Cooling	Sensor thermoelectric cooling, camera passive air cooling	Sensor thermoelectric cooling, camera passive air cooling
Detection area / mm ²	15.9 x 12.7	9.6 x 7.6
Lateral resolution(s) / microlenses	45 x 36	45 x 35
Focal length (typical) / mm	12	4
Default optimization wavelengths / nm	1310, 1550, 1625	1310, 1550, 1625
Wavelength range (high precision)	Opt. WL +/- 10%	Opt. WL +/- 10%
Greyscales / Bit	14	14
Weight / kg	0.4	0.4
Camera Bus	GigE	GigE
Sensor head dimensions (L x W x H) / mm ³	110 x 55 x 55	110 x 55 x 55
Evaluation Rate (typical) / Hz	30	30
Maximum tilt (directly measurable) / °	+/- 3	+/- 3
Angular accuracy of all spots of SHSCam / μrad	6	10
Minimum local wavefront curvature/μrad	40	18
Typical unreferenced accuracy* in RMS of wavefront / nm (12.5mm circular)	25	30
Repeatability** in RMS of wavefront difference / nm (12.5mm circular)	4	4

* The unreferenced accuracy is the measurement error of an unreferenced sensor head (out-of-the-box accuracy).

** The repeatability is the difference between two successive wavefront measurements (≈achievable accuracy of a referenced sensor head)