IR Camera Spica 640 HS and 1280 HS

Technical Data

Category	Specifications SPICA 640	Specifications SPICA 1280
Camera Type	SPICA 640 SM HS	SPICA 1280 SM HS
Detector material	Indium antimonide (InSb)	Indium antimonide (InSb)
Size of focal plane array	640 x 512 pixels	1280 x 1024 pixels
Pixel pitch	15 µm x 15 µm	10 µm x 10 µm
Spectral range	SWIR / MWIR: 1.5 – 5.5 µm or MWIR: 3 – 5 µm	SWIR / MWIR: 1.5 – 5.5 µm or MWIR: 3 – 5 µm
Aperture	F/1.5 or F/2.0	F/1.5 or F/2.0
A/D converter resolution	13/14/15 bit	13 bit
Pixel operability	> 99.5% (> 99.9 % typical)	> 99.5% (> 99.9 % typical)
Maximum full-frame rate	356 Hz	180 Hz
Maximum subframe rate	Up to 5000 Hz / 3000 Hz	Up to 5000 Hz / 3000 Hz
NETD (20°C, 75% filling degree)	< 25 mK	< 20 mK
Integration mode	Snapshot (integrate while read / integrate then read)	Snapshot (integrate while read / integrate then read)
Integration time tint	1µs ... 10 ms	1 µs ... 10 ms
Subframe mode	Selectable in size and position	Selectable in size and position
Image data interface	Digital, camera-link medium	Digital, camera-link full
Trigger interface	TTL-Trigger IN, Trigger-Gate IN, Exposure OUTt, opto-isolated	TTL- Trigger IN
Detector cooler	Stirling cooler	Stirling cooler
Cool-down time	10 minutes (@ 20°C operating temperature)	10 minutes (@ 20°C operating temperature)
Cooler lifetime	> 20 000 h (MTTF)	> 20 000 h (MTTF)
Operation temperature	0°C ... 40°C (non-condensing)	0°C ... 40°C (non-condensing)
Casing	Aluminium	Aluminium
Dimensions (l x w x h)	240 mm x 120 mm x 120 mm (without lens)	248 mm x 120 mm x 135 mm (without lens)
Weight	Approx. 5 kg (without lens)	Approx. 5 kg (without lens)
Power supply	24 VDC ≤ 25 W	24 VDC ≤ 25 W