

Specifications

Model	IK1112
Sensor	3/4" InGaAs, progressive scan
Image Resolution (pixels)	320 (H) x 256 (V)
Pixel Size	30 μm x 30 μm
Sensor fps (internal)	110 fps at 320 x 256 pixels
Shutter	Global Shutter
Exposure Time Range	35 μs to 1 s
A/D Resolution	14 bit
Gain	Two modes (low gain and high gain)
Internal Image Memory	32 MB
Data Interface	USB2.0 (high speed)
Power Supply	USB bus powered
Power Loss	typ. 2.1 W
Temperature Range (operational)	0 °C to + 55 °C
Temperature Range (storage)	-40 °C to + 85 °C
Dimensions (without lens)	31.4mm x 45mm x 95mm
Weight	130g (without lens)
Lens Adapter	C - Mount adjustable
Options	Digital Inputs: <ul style="list-style-type: none"> •1x opto - decoupled (programmable) Digital Outputs: <ul style="list-style-type: none"> •1x opto - decoupled (strobe) •Temperature sensor near the sensor •RS232 interface (optional) •USB cable strain relief [order: ZK - ZE - 02] •Tripod socket adapter [order: ZK - FA - 02]

*Sensor specifications are valid within a centered image field of 318 x 254 pixels.



InGaAs USB 2.0 Camera

The optional available M42 to C - mount adapter or F - mount (Nikon) to C-mount extends the number of lenses which can be used with this camera.

DataSheet SWIR Camera Series

This series of cameras are highly sensitive to infrared (SWIR, NIR). The sensitivity interval reaches from 900 nm to 1700 nm.



Specifications

Model	IK1513	IK1523
Sensor Size	3/4" InGaAs matrix sensor, progressive scan	1/3" InGaAs matrix sensor, progressive scan
Resolution	320 (H) x 256 (V) pixels	640 (H) x 512 (V) pixels
Pixel Size	30 μm x 30 μm	25 μm x 25 μm
Spectral Range	0.9 μm to 1.7 μm	0.9 μm to 1.7 μm
Active Sensor Size	9.6mm (H) x 7.68mm (V)	16mm (H) x 12.8mm (V)
A/D Resolution	14 bit	14 bit
Frame Rate	110 fps	30 fps
Exposure Time	35 μs to 1 s	67 μs to 1 s
Gain	Two modes (low gain and high gain)	Two modes (low gain and high gain)
Digital Interface	USB2.0 (High Speed)	USB2.0 (High Speed)
Trigger	opto - decoupled	opto - decoupled
Power Supply	12 - 24 v (DC)	12 - 24 v (DC)
Power Loss	2 W (without cooling) 10 W (with cooling)	2 W (without cooling) 10 W (with cooling)
Sensor Cooling	TEC	TEC Peltier
Temperature Range (operational)	0 °C to + 55 °C	0 °C to + 55 °C
Temperature Range (storage)	-40 °C to + 85 °C	-40 °C to + 85 °C
Dimensions (without lens)	91mm x 91mm x 86mm	91mm x 91mm x 86mm
Weight	approx. 850g	approx. 850g
Lens Mount	M42 or C-Mount, adjustable (Optional F-mount Adapter)	M42 or C-Mount, adjustable (Optional F-mount Adapter)
Filter Thread	M35.5 in front of the sensor	M35.5 in front of the sensor