Technical Specifications

Camera Model	IRS336		IRS640	
Detector Resolution	336 x 256 px		640 x 512 px	
Detector Type	Focal Plane Array (FPA), uncooled microbolometer			
Spectral Range	7.5–13 µm			
Pixel Size	17 x 17 µm		17 x 17 µm	
Frame Rate	9 Hz	60 Hz*	9 Hz	50/60/200 Hz (with windowing)
Measurement				
Object Temperature Range	Range 1: –25 to 135 °C, range 2: –40 to 550 °C, optional high-temperature range: 200–1,200 °C (with ND filter)			
Accuracy	±2 °C (±3.6 °F) or ±2 % of reading (10–100 °C @ 10–35 °C amb)			
NETD	< 30 mK (f/1.0, range 1)			
Lenses				
Fixed Lenses	3.8 mm, 7.5 mm, 9 mm, 13 mm, 19 mm, 35 mm			
Interchangeable Lenses	6 mm, 10 mm, 12 mm, 18 mm, 25 mm, 60 mm, 100 mm, zoom lens 35–105 mm, microscopy lens 20 µm			
Image Processing				
Configuration	Web interface			
Areas of Interest	Spot, line, polyline, elliptical line, rectangular area, elliptical area, polygon area			
Smart Realignment	Intelligent search and compensation algorithm to guarantee accurate temperature readings independent of e.g. machine or part tolerances			
Temperature Evaluation	Min, max, mean, range, variance, standard deviation			
Comparison Functions	Equal, less, greater, in range, out of range			
Script Interface	Scripting with Lua			
Interfaces				
Ethernet Protocols	DHCP, DNS, GigE Vision, HTTP(S), mDNS, NTP, FTP, SSH, Modbus TCP, (MQTT (TLS), OPC-UA, PTP IEEE1588, Profinet (CC-A, RT-1), ONVIF)**			
Ethernet Type	10/100/1,000 MBit/s	Ethernet connector		8-pin A-coded M12 connector
Image Streaming Protocol	GigE Vision with GeniCam, (RTSP)**	Ethernet image streaming		16-Bit, 14-Bit, 8-Bit
Video out	Available on request			
Input/Output				
Digital Input	2x electrically isolated; 5–24 VDC (max. 27 VDC)	Encoder/resolver input		A+, A–, B+, B–; high-speed, dual RS-422/RS-485 receiver
Digital Output	2x electrically isolated; 5–24 VDC	Analog output		0–5 VDC
Digital I/O, Supply Voltage	4.5–30 VDC, max. 100 mA	Analog input		0–5 VDC
Environmental				
Protection Class	IP 67 (IEC 60529)	Bump		200 g (IEC 60068-2-29)
Operating Temperature Range	–40 to 60 °C (non condensing)	Vibration		4.3 g (IEC 60068-2-6)
Storage Temperature Range	–50 to 80 °C (IEC 68-2-1 and IEC 68-2-2)	RoHS		Compliant
Humidity	0–95 % relative humidity (IEC 60068-2-30)			
Mechanical				
Dimensions	I55 x 55 x 77 mm (w/o lens, w/ connectors)	Lens mount		M34x0.5, M34x0.75, M46x0.75
Weight	270 g (w/o lens)	Base mounting		4x M3 threaded holes (at all 4 sides)
Accessories				
Adjustable mounting bracket, mounting adaptors, lens protection cap with Ge window, air barrier, terminal panel, protective enclosures (IRCamSafe series), focus tool				

*   Subject to dual use export regulations (for frame rates > 9 Hz).
()** Coming soon.