



INDUSTRIAL/MACHINE VISION APPLICATIONS

FLIR ORYX

P/N: 0RX-10G-71S7

The ORX-10G-71S7 combines a Sony IMX420 global shutter CMOS sensor and a high-speed 10GigE interface to boost your imaging throughput. The IMX420 with selectable conversion gain makes it easy to switch between low read noise and high sensitivity for low-light imaging, and high saturation capacity for more brightly lit conditions.

FEATURES

HIGH RESOLUTION SENSOR ON HIGH SPEED INTERFACE

Increase throughput by capturing 7.1 MP Global Shutter images at 112 FPS

RELIABILITY AND SIMPLICITY

10GBASE-T interface supports cables over 60m and makes multi-camera system set-up easy

FLEXIBILITY FOR INTEGRATORS

Develop innovative solutions quickly with GigE Vision compatibility and advanced on-camera features

APPLICATIONS

SPORTS ANALYTICS AND MOTION TRACKING

AUTOMATED OPTICAL INSPECTION

RESEARCH

HIGH-SPEED VOLUMETRIC CAPTURE









SPECS	ORX-10G-71S7M-C	ORX-10G-71S7C-C
Resolution	3208 x 2200	
Frame Rate	112 FPS	
Megapixels	7.1 MP	
Chroma	Mono	Color
Sensor	Sony IMX420, CMOS, 1.1"	
Readout Method	Global shutter	
Pixel Size	4.5 µm	
Lens Mount	C-mount	
ADC	8-bit, 10-bit, and 12-bit	
Minimum Frame Rate*	1 FPS	
Gain Range*	0 to 47 dB	
Exposure Range*	10 μs to 30 s	
Acquisition Modes	Continuous, Single Frame, Multi Frame	
Partial Image Modes	Pixel binning, decimation, ROI	
Image Processing	Gamma, lookup table, and sharpness	Color correction matrix, gamma, lookup table, saturation, and sharpness
Sequencer	Up to 8 sets using 2 features	
Image Buffer	240 MB	
User Sets	2 user configuration sets for custom camera settings	
Flash Memory	4 MB non-volatile memory	
Opto-isolated I/O	2 input, 2 output	
Non-isolated I/O	2 bi-directional	
Serial Port	1 (over non-isolated I/O)	
Auxiliary Output	3.3 V, 120 mA maximum	
Interface	10GigE	
Power Requirements	Externally powered over GPIO (12 - 24 V)	
Power Consumption	13.6 W maximum (13.2 W nominal)	
Dimensions/Mass	60 mm x 60 mm x 100 mm / 500 g	
Machine Vision Standard	GigE Vision	
Time Synchronization Protocol	IEEE 1588 Precision Time Protocol	
Compliance	CE, FCC, KCC, RoHS, REACH. The ECCN for this product is: EAR099.	
Temperature	Operating: 0°C to 50°C Storage: -30°C to 60°C	
Humidity	Operating: 20% to 80% (no condensation) Storage: 30% to 95% (no condensation)	
Warranty	3 years	

 $[\]ensuremath{^{*}\text{Ranges}}$ are the same in binning and no binning modes.