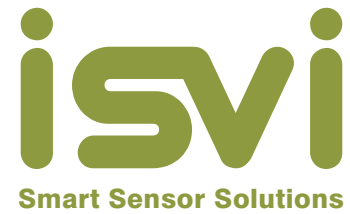
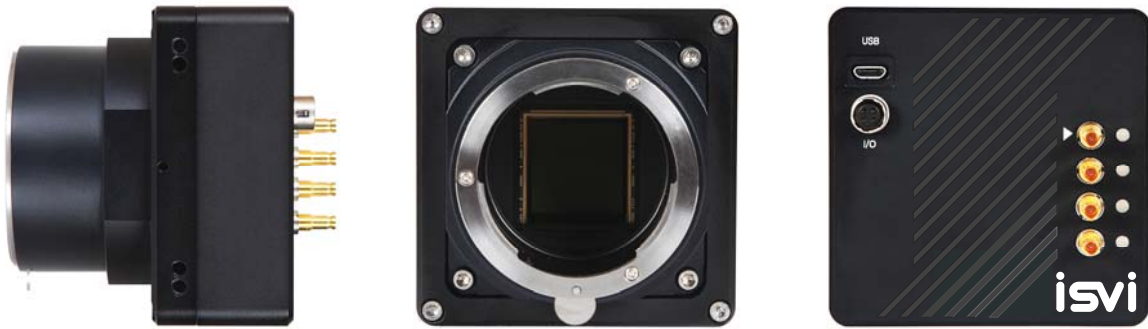


# RAZOR SERIES



RESOLUTION, ACCURACY, SPEED, RETURN-ON-INVESTMENT



## Resolution

The most popular resolutions for critical applications  
Large field of views  
High magnification without loss of measurement fidelity

## Accuracy

Accurate, automatic image correction engine  
Precise and stable multi-axis sensor alignment  
More pixels for defect identification

## Speed

Increased inspection throughput  
Faster frame rate, transferring images in less time  
Higher transfer speeds, more time for image processing

## Return-on-investment

Industry-best price/performance  
Affordable performance upgrades to existing CL systems  
Throughput, Accuracy and Reliability

## High-Resolution Sensors

12MP, 16MP, 25MP

Global Shutter CMOS

High-Speed Frame Rates

181fps, 124fps, 72fps, 81fps

CoaxPress CXP6

Monochrome, NIR\* & Color

Automatic FFC & DPC correction

8/10\*-bit Output Resolution

\*not all models

[www.isvi-corp.com](http://www.isvi-corp.com)

**ISVI is a forerunner in the design and construction of advanced high-speed, high-resolution camera technology.**

ISVI's Smart Sensor Solutions deliver the resolution, accuracy, speed and return-on-investment required for cutting-edge imaging system design in many demanding application areas including flat panel display, semiconductor, solar wafer, and secondary battery inspection, in addition to 2D & 3D metrology, virtual reality, bio-medical, aerospace, robotics, microscopy, sports & entertainment, and factory automation.

# SPECIFICATIONS

ISVI RAZOR models	IC-M12RZ-CXP IC-C12RZ-CXP	IC-M16RZ-CXP IC-C16RZ-CXP	IC-M25RZ-CXP IC-C25RZ-CXP	IC-M26RZ-CXP IC-N26RZ-CXP IC-C26RZ-CXP
Resolution	4096(H) x 3072(V), 12.6Mpx	4096(H) x 4096(V), 16.8Mpx	5120(H) x 5120(V), 26.2Mpx	5120(H) x 5120(V), 26.2Mpx
Sensor	CMOSIS CMV12000	OnSemi Vita16K	OnSemi Vita25K	OnSemi Python25K
Active Area Dimensions (mm)	22.50 H / 16.90 V / 28.10 Ø	18.43 H / 18.43 V / 26.06 Ø	23.04 H / 23.04 V / 32.58 Ø	23.04 H / 23.04 V / 32.58 Ø
Pixel Size	5.5µm <sup>2</sup>	4.5µm <sup>2</sup>		
Chroma	Mono / Color			Mono / Ext. NIR / Color
Frame Rate in 8-bit output	181Hz	124Hz	72Hz	81Hz
Output Format	Mono8, BayerRG8			
CoaXPress Interface	CXP6: 4 Links	CXP6: 1, 2 and 4 Links, CXP3: 2 and 4 Links		
Dynamic Range @ Full Well	60dB @ >12K e <sup>-</sup>	53dB @ >19K e <sup>-</sup>	56dB @ >22K e <sup>-</sup>	59dB @ 12K e <sup>-</sup>
Exposure Mode	Continuous - Trigger Timed - Trigger Width			
Exposure Control	Programmable from 3 µsec to 10 sec in 1 µsec steps			
Trigger Control	Programmable Period in 1 µsec steps, External PWC			
Gain Control	Digital fine gain 1x - 10x in 0.001 steps			
Image Control	PRNU Correction, FFC Correction, Defect Pixel Correction			
Programmable Functions	Exposure Start Delay Strobe Pulse Start Delay & Width Region of Interest User Calibration Areas			
Lens Mount	F-Mount, M42, M72, Custom OEM			
Environmental Operating Conditions	0°C to +40°C, extended temp. possible with reduced performance 20% - 90% non-condensing 25G (Half sine 6-10ms XYZ) / 10G (5-150Hz, 1min, XYZ)			
Storage Temperature	-10°C to +70°C			
Power Requirements	24VDC Power over CXP (PoCXP) <13W			
Dimensions (H x W x L in mm)	80 x 80 x 36 without lens mount and connectors			
Weight	550g (including F-Mount)			
Compliance	CoaXPress 1.1/1.0, GenICam, RoHS, CE, FCC			

Specifications subject to change without notice

### I/O Connector

Pin	I/O	Signal
1	INPUT	TRIGGER+
2	INPUT	TRIGGER-
3	GND	GROUND
4	OUTPUT	STROBE/EXP

Receptacle (female)  
Cable mating plug: #Hirose HR10A-7P-4P (male)

### Ordering Format

IC - **XXX** RZ - **CXX** - **XX**

M = Monochrome  
C = Color  
N = Ext. NIR\*

12 = IC-X12RZ-CXP  
16 = IC-X16RZ-CXP  
25 = IC-X25RZ-CXP  
26 = IC-X26RZ-CXP

\* IC-N26RZ-CXP only

1 = CXP6

F = F-Mount  
7 = M72 x 0.75  
4 = M42 x 1.0

B = BBAR  
I = IR-Cut  
N = No Filter

Custom OEM lens mounts and filtering available

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## ISVI KOREA (Headquarters)

#103-808 SK Ventium, 166 Gosan-ro, Gunpo-si, Gyeonggi-do  
15850 S. Korea T/ +82.31.427.3243 E/ sales@isvi-corp.com

## ISVI GERMANY

Babenhäuser Str. 50, Geb.5, 63762 Grossostheim, Germany  
T/ +49 151 656 42940 E/ sales@isvi-corp.com