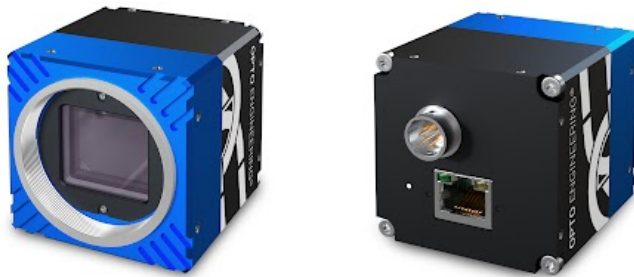




ITA196-GM-10J | DATASHEET

Area scan camera 19.6MP, Sony IMX367, CMOS Global shutter, 4/3", Mono, 1 GigE, POE, M42x1 FD 12 mount



KEY ADVANTAGES

MADE IN ITALY

Cameras designed and manufactured in Italy by Opto Engineering.

TOP QUALITY SERVICE

5 years warranty.

HIGH ROBUSTNESS

Aluminum body & steel lens mount, shock & vibration certified, wide temperature range.

MAXIMUM CONNECTIVITY

Isolated PoE supply, broad range of I/Os, serial communication.

HIGH PROCESSING CAPABILITY

Large on-board image buffer, large FPGA.

EXCELLENT QUALITY/PRICE RATIO

The **ITALA-G series** is a series of GigE Vision industrial cameras designed and manufactured in Italy by Opto Engineering®.

GEN*i*CAM

GigE VISION



SPECIFICATIONS

Sensor Specification

Megapixel		19.6
Resolution		4432 x 4436
Sensor format		4/3"
Sensor diagonal	(mm)	21.6
Pixel size	(µm)	3.45
Sensor model		IMX367
Sensor type		CMOS
Shutter		Global
Chroma		Mono

Connectivity

Data connector		RJ45
Data interface		1 GigE
I/O connector		12-pin Hirose
I/O interface		2x opto-isolated input 4x opto-isolated output
Serial interface		RS232, RS485
Liquid lens controller		no
Encoder interface		yes, incremental
Power supply	(V)	12-24, PoE (IEEE 802.3af class 2)
Max power consumption ¹	(W)	6

Camera Specification

Filter		AR glass
Frame rate	(fps)	6.0
Frame rate burst	(fps)	11.6
Exposure time		2.80 µs - 10 s
ADC resolution	(bit)	10/12
Dynamic range	(dB)	70.0
Gain range	(dB)	0-48
SNR ¹	(dB)	40.2
Image buffer	(MB)	384
Image processing		Binning, decimation, ROI, gamma, black level, LUT, defective pixel correction
Pixel formats		Mono 8/ 10p/ 10Packed/ 12p/12Packed
Chunk data		yes
User sets		3
Timers/Counters		2/4
Synchronization		Free run, software trigger, hardware trigger

¹ Measured with PoE power supply

² To be measured after pre-series production

All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only. Data are reported by design, actual lens performance may vary due to manufacturing tolerances.

Compliance

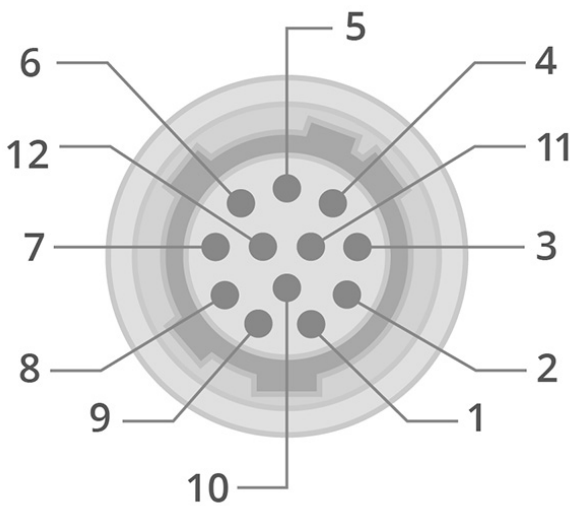
Standards	GigE Vision 2.x, GenICam, GenTL	
Client software	ITALA View or other GigE Vision 2.x software	
Operating systems	32/64-bit Windows 7/8/10	
Shock and vibration ²	n.a.	
Warranty (years)	5	

Environment

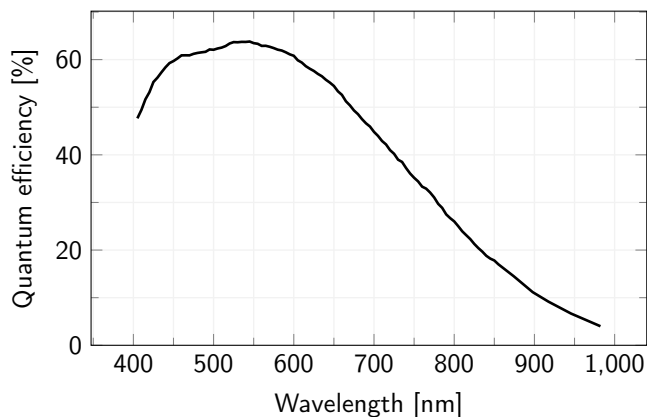
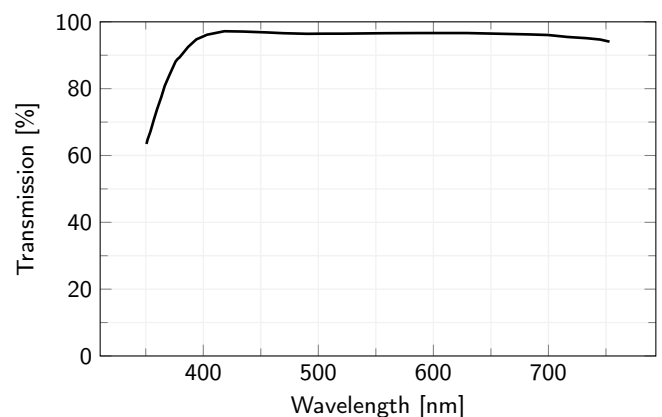
Operating temperature ²	(°C)	0-50
Storage temperature ²	(°C)	-10-+60
Operating relative humidity	(%)	20-80, non condensing
IP rating	IP30	

Mechanical Specifications

Mount	M42x1 FD 12	
Dimensions (mm)	52 x 52 x 56.6	
Clamping system	16x M3 threaded holes (on all sides)	
Mass (g)	250	

HIROSE PINOUT


Pin	Signal
1	GND
2	+VIN
3	Opto OUT 3
4	Opto IN 0
5	Opto OUT 2
6	Opto OUT 0
7	Opto REF GND
8	RS232 RX
9	RS232 TX
10	Opto REF V+
11	Opto IN 1
12	Opto OUT 1

SENSOR QUANTUM EFFICIENCY

FILTERS TRANSMISSION


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RECOMMENDED ACCESSORIES

Opto-Engineering® suggests the following accessories to power the camera:

- **CBETH003**, Ethernet cable, CAT6, industrial level, high flexible cable with screw, 5 m
- **CBGPIO001**, I/O cable, side 1 HIROSE 12 pin, side 2 cable end, 3 m
- **RT-POE15M-1AFE-R**, 15.4W Single Port Power-over-Ethernet IEEE802.3af Power Injector

COMPATIBLE PRODUCTS

Full list of compatible products available [here](#).



A wide selection of innovative machine vision components.

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