

ITA89-GC-10C-IP | DATASHEET

Area scan camera 8.9MP, Sony IMX267, CMOS Global shutter, 1", Color, 1 GigE, POE, C mount



GEN**(i)**CAM











IP67-RATED HOUSING

Protection against water and dust.

MADE IN ITALY

Cameras designed and manufactured in Italy by Opto Engineering.

TOP QUALITY SERVICE

5 years warranty.

RUGGEDIZED

-25° C to 65° operating temperature. Stainless steel mount, milled aluminum body. Tested for shock and vibration resistance.

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











ITALA-G.IP series is a series of GigE vision PoE area scan cameras featuring an IP67-rated housing. By adding sealed lens tubes from IPT series and IP67 cables, ITALA G.IP cameras ensure protection against solid particles like dust, dirt, and sand and water.

KEY FEATURES



















IP67

1 GIGE

12-24 VOLT POWER OVER 12-BIT DEPTH **ETHERNET**

BURST

IMAGE COM-PRESSION

FAST TRIGGER MODE

DUAL EXPOSURE



















SEQUENCER

PRECISION TIME **PROTOCOL**

SCHEDULED ACTION COMMAND

REGION OF INTEREST

BINNING AND **DECIMATION**

CHUNK DATA AUTO WHITE BALANCE

COLOR

OPTO CORRECTION ISOLATED I/O

















MATRIX



ENCODER

DUAL SERIAL INTERFACE

MODBUS

API C

API C++

API C#

API Python

WINDOWS

LINUX



SPECIFICATIONS

| C | | C | _::::-: | ation |
|-----|------|-----------|---------|-------|
| \or | ISNE | ND | | ation |
| | | | | |

| Megapixel | | 8.9 | |
|-----------------|------|-------------|--|
| Resolution | | 4112 x 2176 | |
| Sensor format | | 1" | |
| Sensor diagonal | (mm) | 16.0 | |
| Pixel size | (µm) | 3.45 | |
| Sensor model | | IMX267 | |
| Sensor type | | CMOS | |
| Shutter | | Global | |
| Chroma | | Color | |

Connectivity

| Data connector | | M12 X-Coded Female IP67 |
|------------------------------------|-----|---|
| Data interface | | 1 GigE |
| I/O connector | | M12 A-Coded Male IP67 |
| I/O interface | | 2x opto-isolated input 4x opto-isolated output |
| Serial interface | | RS232, RS485 |
| Liquid lens controller | | no |
| Enconder interface | | yes, incremental |
| Power supply | (V) | 12-24, PoE (IEEE 802.3af class 2) |
| Max power consumption ² | (W) | 3.9 |

Camera Specification

| Filter | | IR cut |
|-------------------------|-------|---|
| Frame rate ¹ | (fps) | 13.1 |
| Frame rate burst | (fps) | 20.8 |
| Exposure time | | 1.51 µs - 10 s |
| ADC resolution | (bit) | 10/12 |
| Dynamic range | (dB) | 69.7 |
| Gain range | (dB) | 0-48 |
| SNR | (dB) | 40.0 |
| Image buffer | (MB) | 384 |
| Image processing | | Binning, decimation, ROI, gamma, black level, LUT, defective pixel correction, white balance, color corection matrix |
| Pixel formats | | Mono 8, RGB8, Bayer GR 8/10p/10Packed/12p/12Packed, YUV 422_8, YUV411_8_UYYVYY |
| Chunk data | | yes |
| User sets | | 3 |
| Timers/Counters | | 2/4 |
| Synchronization | | Free run, software trigger, hardware trigger, PTP (IEEE 1588) |

Compliance

| Standards | | GigE Vision 2.2, GenlCam, GenTL |
|---------------------|---------|--|
| Client software | | ITALA View or other GigE Vision 2.x software |
| Operating systems | | ITALA View or other GigE Vision 2.x software 64-bit Windows 10/11 Ubuntu 18.04/20.04/22.04 EN 60068-2-27 EN 60068-2-6 EN 60068-2-64 |
| Operating systems | | Ubuntu 18.04/20.04/22.04 |
| | | EN 60068-2-27 |
| Shock and vibration | | EN 60068-2-6 |
| | | EN 60068-2-64 |
| Warranty | (years) | 5 |
| | | |

Mechanical Specifications

| Mount | | C |
|-----------------|------|--------------------------------------|
| Dimensions | (mm) | 54 x 54 x 51.3 |
| Clamping system | | 16x M3 threaded holes (on all sides) |
| Mass | (g) | 200 |

Environment

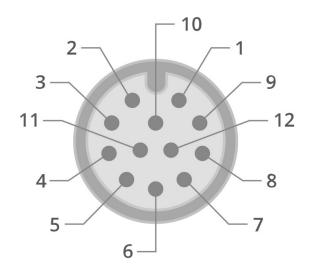
| Operating temperature ³ | (°C) | -25 - +65 |
|------------------------------------|------|-----------------------|
| Storage temperature ⁴ | (°C) | -10 - +60 |
| Operating relative humidity | (%) | 20-80, non condensing |
| IP rating | | IP67 |

- ¹ Color-model's fps are calculated using BayerRG8 pixel format
- ² Measured with 24V power supply
- ³ Case temperature, measured on the front part of the camera body

⁴ Ambient temperature

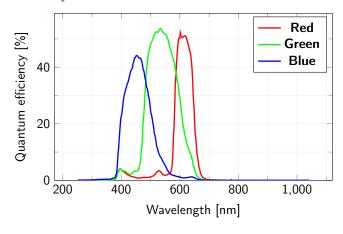


M12 PINOUT

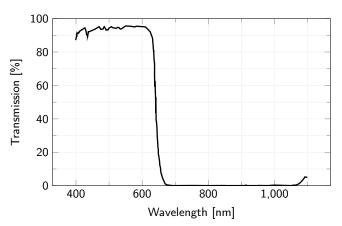


| Pin | Signal | |
|-----|--------------|--|
| 1 | GND | |
| 2 | +VIN | |
| 3 | Opto OUT 3 | |
| 4 | Opto IN 0 | |
| 5 | Opto OUT 2 | |
| 6 | Opto OUT 0 | |
| 7 | Opto REF GND | |
| 8 | RS232 RX | |
| 9 | RS232 TX | |
| 10 | Opto REF V+ | |
| 11 | Opto IN 1 | |
| 12 | Opto OUT 1 | |

SENSOR QUANTUM EFFICIENCY



FILTERS TRANSMISSION



RECOMMENDED ACCESSORIES



Opto-Engineering® offers sealed lens tubes of different diameters to be used with varying lens sizes (IPT-Series) and sealed M12 cables (CB series) to complete your vision system.

COMPATIBLE PRODUCTS

Full list of compatible products available here.



A wide selection of innovative machine vision components.