



COE-004-C-POE-021-IR-C | DATASHEET

OPTO ENGINEERING

Area scan camera IMX287, CMOS, Global shutter, 720 x 540, 0.4 MP, 6.9 µm pix, 1/2.9", Color, 104 fps, 1 GigE, POE, C mount, IR cut filter



KEY ADVANTAGES

High quality sensors

New SONY Pregius CMOS Global shutter sensors provide high quality images.

GigEVision® protocol & GenICam® standard

Standard vision SDK platform for easy integration in existing software.

Full GenICam® compliant: easy to integrate

GenICam® compliant SDK package provides more flexibility to Vision Systems.

GigE PoE compliance

With the COE-G cameras, you do not need separate cables to transfer the information to the computer and provide power to the camera.

120 MB RAM and Frame Rate up to 300fps

High frame rate ideal for high speed applications. The internal memory up to 120MB guarantees no image loss and enables useful features like Record / Playback and sequence recordings.

The COE-G series includes Gigabit Ethernet cameras equipped with the latest sensors, ranging from high speed VGA to the latest 12MP SONY Pregius sensor, which deliver GigE connectivity with high frame rate.



SPECIFICATIONS

Sensor Specification

| | |
|----------------------|-----------|
| Megapixel | 0.4 |
| Resolution | 720 x 540 |
| Sensor format | 1/2.9" |
| Sensor diagonal (mm) | 6.2 |
| Pixel size (µm) | 6.9 |
| Sensor model | IMX287 |
| Sensor type | CMOS |
| Shutter | Global |
| Chroma | Color |

Connectivity

| | |
|--|---|
| Data connector | RJ45 |
| Data interface | 1 GigE |
| I/O connector | 6-pin Hirose |
| I/O interface | 1x opto-isolated input 1x opto-isolated output 1x bi-directional non-isolated |
| Serial interface | no |
| Encoder interface | no |
| Power supply (V) | 9-26, PoE |
| Max power consumption ² (W) | 3.1 |

Camera Specification

| | |
|------------------------------|---|
| Filter | IR cut |
| Framerate ¹ (fps) | 104 |
| Exposure time | 1 µs - 10 s |
| Dynamic range (dB) | 74 |
| Gain range (dB) | 0-20 |
| SNR (dB) | 41 |
| Image buffer (MB) | 128 |
| Pixel formats | Mono 8/10/12, RGB8, Bayer GR 8/10/10Packed/12/12Packed, YUV 422Packed, YUV422_YUYVPacked |
| Chunk data | yes |
| User sets | 3 |
| Timers/Counters | 0/1 |
| Synchronization | Free run, software trigger, hardware trigger |

¹ Color-model's fps are calculated using RGB8 pixel format

² Measured at 12 VDC

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, GenICam | |
| Client software | OECS or other GigEVision software | |
| Operating systems | 32/64-bit Windows XP/7/10 | |
| Warranty | (years) | 1 |

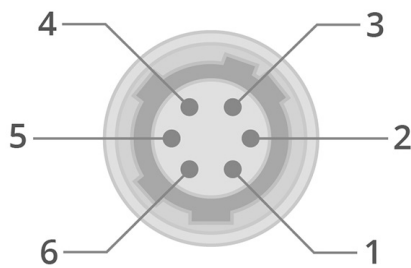
Environment

| | | |
|-----------------------------|------|-----------------------|
| Operating temperature | (°C) | 0-50 |
| Storage temperature | (°C) | -30-+70 |
| Operating relative humidity | (%) | 20-80, non condensing |
| IP rating | IP30 | |

Mechanical Specifications

| | | |
|-----------------|--|--------------|
| Mount | C | |
| Dimensions | (mm) | 29 x 29 x 55 |
| Clamping system | 3x M3 and 4x M2 threaded holes (on one side) | |
| Mass | (g) | 68 |

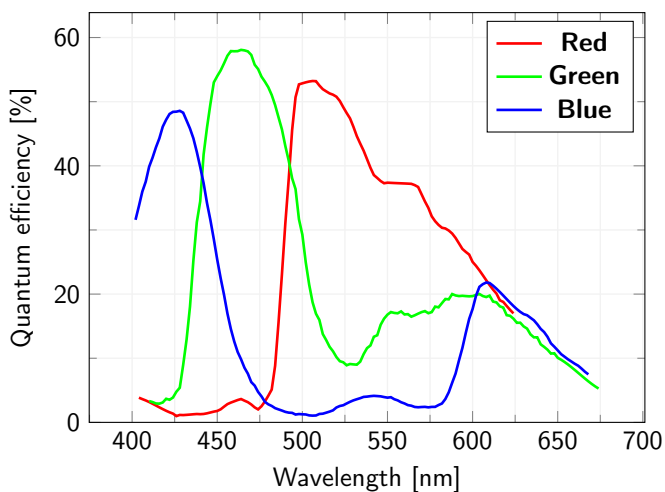
HIROSE PINOUT



Device side

| Pin | Signal | I/O | Description |
|-----|-------------|--------|--------------------------------------|
| 1 | 12V | Input | DC 12V |
| 2 | Opt-Iso In | Input | Opto-isolated input |
| 3 | GPIO | I/O | Can be configured as input or output |
| 4 | Opt-Iso Out | Output | Opto-isolated output |
| 5 | I/O Ground | Input | Opto-isolated I/O grounding |
| 6 | GND | Input | Power and GPIO grounding |

SENSOR QUANTUM EFFICIENCY



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
- **COE-6P-OPEN1-030-01**, HIROSE 6-pin/Open end cable, 3 meters
- **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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