

HR Area scan camera IMX183, CMOS, Rolling shutter, 5472 x 3648, 20.4 MP, 2.4 pix, 1", Color, 5.9 fps, 1 GigE, C mount, IR cut



KEY ADVANTAGES

The best cameras you can buy right now

The cameras feature the highest resolution sensors and best image quality maintaining an extremely interesting quality/price ratio.

Available in GigE, USB 3.0, CameraLink, 10GigE

GigE allows flexible connectivity, while USB3.0 offers high speed and easy installation. Camera Link guarantees maximum performance and direct access to the camera sensor while 10GigE provides the highest throughput for Ethernet connectivity.

Full GenICam® compliant: easy to integrate

COE HR AS-X are GigEVision®, USB3 Vision® and GenICam® compliant, making software integration quick and easy.

120 MB On-board image buffer

The internal memory up to 120MB guarantees no image loss and enables useful features such as Record / Playback and sequence recordings.

COE High Resolution Area Scan-X Cameras are ideal for high resolution and high speed inspections.

SPECIFICATIONS

Sensor Specification

| | | |
|-----------------|------|-------------|
| Megapixel | | 20.4 |
| Resolution | | 5472 x 3648 |
| Sensor format | | 1" |
| Sensor diagonal | (mm) | 15.8 |
| Pixel size | (µm) | 2.4 |
| Sensor model | | IMX183 |
| Sensor type | | CMOS |
| Shutter | | Rolling |
| 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 |
| Econder interface | | no |
| Power supply | (V) | 12, PoE |
| Max power consumption ¹ | (W) | 3.5 |

¹ Measured at 12 VDC for PoE cameras, at 5 VDC for USB3.0 camera and at 24V for 10GigE camera

Camera Specification

| | | |
|-----------------|-------|---|
| Filter | | IR cut |
| Framerate | (fps) | 5.9 |
| Exposure time | | 46 µs - 2 s |
| Dynamic range | (dB) | 65.5 |
| Gain range | (dB) | 0-20 |
| SNR | (dB) | 41.5 |
| Image buffer | (MB) | 128 |
| Pixel formats | | Mono 8/10/12, RGB8, Bayer GB 8/10/10Packed/12/12Packed, YUV 422 Packed, YUV422_YUYV_Packed |
| Chunk data | | yes |
| User sets | | 3 |
| Timers/counters | | 0/1 |
| Synchronization | | Free run, software trigger, hardware trigger |

Compliance

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

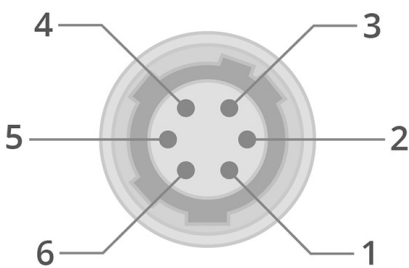
Mechanical Specifications

| | | |
|-------------------------|------|------------------------------------|
| Mount | | C |
| Dimensions ² | (mm) | 44 x 29 x 60 |
| Clamping system | | 4x M3 threaded holes (on one side) |
| Mass | (g) | 100 |

Environment

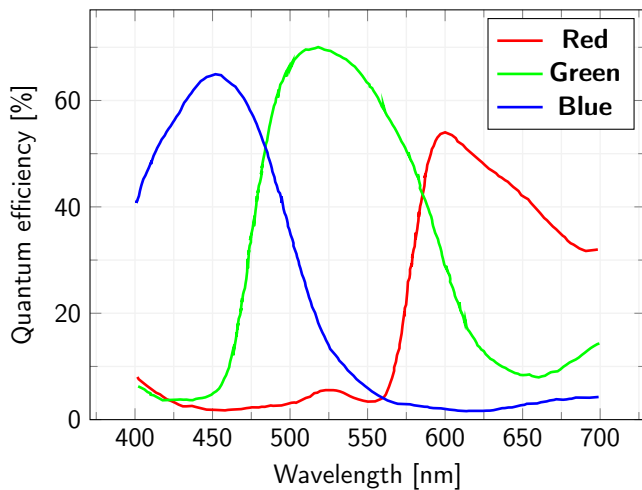
| | | |
|-----------------------------|------|-----------------------|
| Operating temperature | (°C) | 0-50 |
| Storage temperature | (°C) | -30-+70 |
| Operating relative humidity | (%) | 20-80, non condensing |
| IP rating | | IP30 |

HIROSE PINOUT



| 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.

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.