# I2D305M-2RCA11

picoCam2

**2D MACHINE VISION**

**SICK**
Sensor Intelligence.

# I2D305M-2RCA11 | picoCam2

## 2D MACHINE VISION

## Ordering information

| Type | Part no. |
|------|----------|
| I2D305M-2RCA11 | 6071825 |

Other models and accessories ➜ www.sick.com/picoCam2

## Detailed technical data

### Features

| | |
|---|---|
| **Technology** | 2D snapshot |
| **Product category** | Streaming, flexible |
| **Sensor** | CMOS monochrome |
| **Sensor used** | Sony IMX264 |
| **Shutter technology** | Global-Shutter |
| **Illumination** | To be ordered separately as accessories |
| **Further functions** | Line mode, region of interest, long exposure |
| **Lens** | C-mount |
| Optical format | 2/3″ |
| Note | To be ordered separately as accessories |
| **Task** | Measuring - Dimension, contour and volume<br>Monitoring and controlling - Quality<br>Identifying - Pattern<br>Identifying - Classifying<br>Identifying - Sorting |

### Mechanics/electronics

| | |
|---|---|
| **Connection type** | 8-pin Hirose male connector |
| **Supply voltage** | 12 V … 24 V [1] |
| **Power consumption** | ≤ 3.1 W |
| **Enclosure rating** | IP30 |
| **Weight** | 52 g |
| **Dimensions (L x W x H)** | 29 mm x 29 mm x 29 mm |

[1] Or PoE.

### Performance

| | |
|---|---|
| **Bit depth** | 12 bit |
| **Sensor resolution** | 2,448 px x 2,048 px (5.01 Mpixel) |
| **Sensor size** | 8.446 mm x 7.066 mm |
| **Scan/frame rate** | 24 fps, in freerun mode |
| **Memory** | 128 MB |

| | |
|---|---|
| **Exposure time** | 0.035 ms … 2,000 ms |
| **Pixel size** | 3.45 µm x 3.45 µm |

## Interfaces

| | |
|---|---|
| **Ethernet** | ✓, UDP/IP |
| Data transmission rate | 1,000 Mbit/s |
| **Configuration software** | SICK Vision Suite |

## Ambient data

| | |
|---|---|
| **Shock load** | 80 g, EN 60068-2-27 (1995-03), EN 60068-2-29 (1995-03) |
| **Vibration load** | 10 g, 30 Hz … 500 Hz, EN 60068-2-6 (1996-05) |
| **Ambient operating temperature** | 0 °C … +55 °C [1] |
| **Storage temperature** | −20 °C … +60 °C [1] |

[1] Relative humidity: 0% … 100%.

## General notes

| | |
|---|---|
| **Note** | Not free of paint wetting impairment substances. |

## Classifications

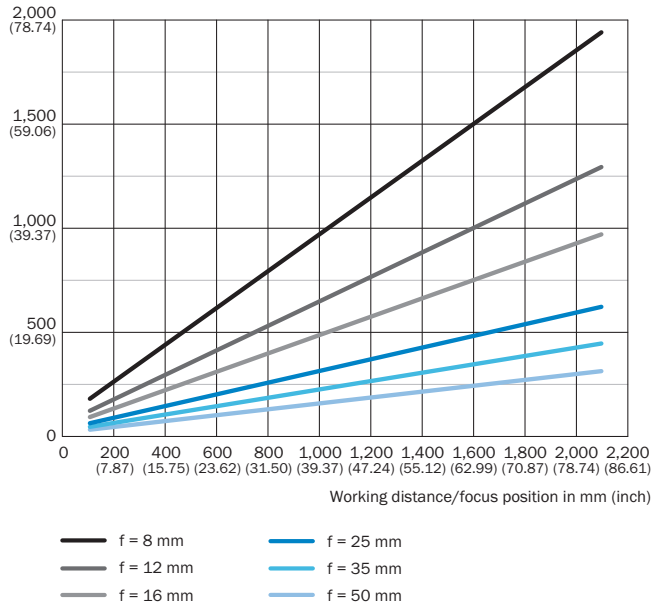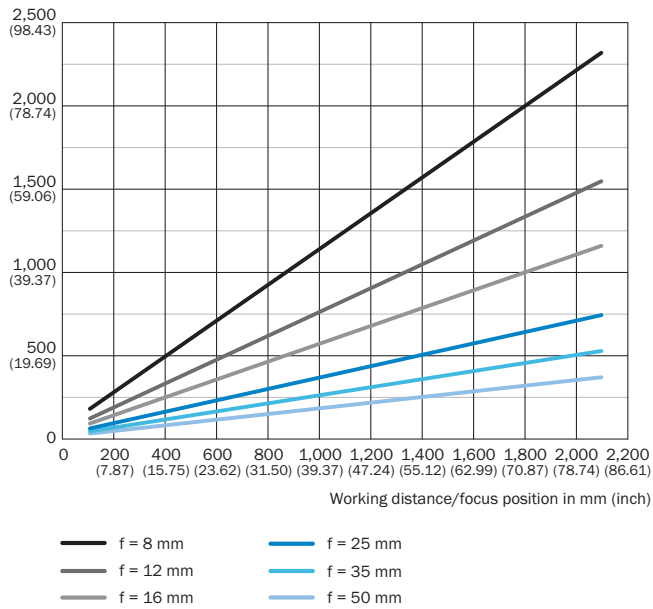| | |
|---|---|
| **ECLASS 5.0** | 27310205 |
| **ECLASS 5.1.4** | 27310205 |
| **ECLASS 6.0** | 27310205 |
| **ECLASS 6.2** | 27310205 |
| **ECLASS 7.0** | 27310205 |
| **ECLASS 8.0** | 27310205 |
| **ECLASS 8.1** | 27310205 |
| **ECLASS 9.0** | 27310205 |
| **ECLASS 10.0** | 27310205 |
| **ECLASS 11.0** | 27310205 |
| **ECLASS 12.0** | 27310205 |
| **ETIM 5.0** | EC001820 |
| **ETIM 6.0** | EC001820 |
| **ETIM 7.0** | EC001820 |
| **ETIM 8.0** | EC001820 |
| **UNSPSC 16.0901** | 43211731 |

## Dimensional drawing (Dimensions in mm (inch))
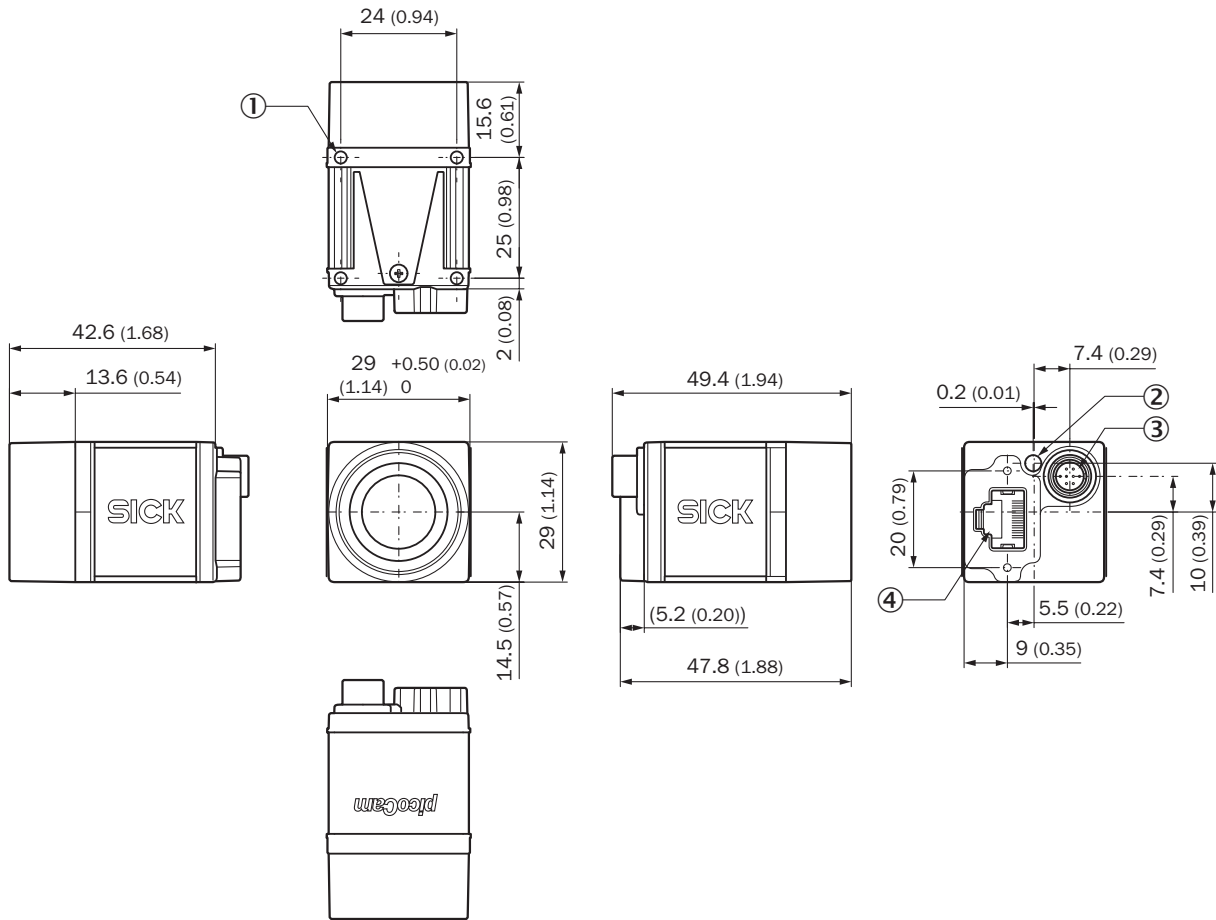
① Blind hole thread M3, 3 mm deep (4 x), for mounting
② LED for status display
③ Power I/O connection, male connector, 8-pin, Hirose HR25
④ Gigabit Ethernet port, RJ45, 8-pin

## Field of view

Field of view y in mm (inch)



Working distance/focus position in mm (inch)

| | |
|---|---|
| —— f = 8 mm | —— f = 25 mm |
| —— f = 12 mm | —— f = 35 mm |
| —— f = 16 mm | —— f = 50 mm |

Field of view x in mm (inch)



Working distance/focus position in mm (inch)

| | |
|---|---|
| —— f = 8 mm | —— f = 25 mm |
| —— f = 12 mm | —— f = 35 mm |
| —— f = 16 mm | —— f = 50 mm |

## Recommended accessories

Other models and accessories ➜ www.sick.com/picoCam2

| | Brief description | Type | Part no. |
|---|---|---|---|
| **Others** | | | |
|  | • **Connection type head A:** Male connector, M12, 5-pin, A-coded<br>• **Connection type head B:** Female connector, Hirose HR25, 8-pin<br>• **Signal type:** Power, digital I/Os<br>• **Cable:** 1 m, PVC<br>• **Description:** Power, digital I/Os, shielded, Connecting cable for picoCam2 cameras to SIMxxxx M12 variants (sensor connection) | YM2Z15-010XXXFHRS8 | 2110626 |
|  | • **Connection type head A:** Male connector, M12, 5-pin, A-coded<br>• **Connection type head B:** Female connector, Hirose HR25, 8-pin<br>• **Signal type:** Power, digital I/Os<br>• **Cable:** 3 m, PVC<br>• **Description:** Power, digital I/Os, shielded, Connecting cable for picoCam2 cameras to SIMxxxx M12 variants (sensor connection) | YM2Z15-030XXXFHRS8 | 2110811 |
|  | • **Connection type head A:** Male connector, M12, 5-pin, A-coded<br>• **Connection type head B:** Female connector, Hirose HR25, 8-pin<br>• **Signal type:** Power, digital I/Os<br>• **Cable:** 5 m, PVC<br>• **Description:** Power, digital I/Os, shielded, Connecting cable for picoCam2 cameras to SIMxxxx M12 variants (sensor connection) | YM2Z15-050XXXFHRS8 | 2110812 |

## Recommended services

Additional services ➜ www.sick.com/picoCam2

| | Type | Part no. |
|---|---|---|
| **Extended warranty** | | |
| • **Product area:** Machine vision, LiDAR sensors, safety camera sensors, Safety laser scanners, Safety radar sensors, Radar sensors, Fixed mount barcode scanners, Image-based code readers, RFID, Mobile handheld scanners<br>• **Range of services:** The services correspond to the scope of the statutory manufacturer warranty (SICK general terms of delivery).<br>• **Duration:** Five-year warranty from delivery date. | Extended warranty for a total of five years from delivery date | 1680671 |

Product data sheet | 2024-11-07 17:36:49

Subject to change without notice

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SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

**For us, that is "Sensor Intelligence."**

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