



picoCam

Ultra-compact, industrial streaming cameras with GigE interface

2D MACHINE VISION

SICK
Sensor Intelligence.



Technical data overview

Sensor	CMOS monochrome CMOS Color CMOS monochrome NIR (depending on type)
Sensor resolution	1,280 px x 1,024 px (1.31 Mpixel, 5:4, SXGA) 1,600 px x 1,200 px (1.92 Mpixel, 4:3, UXGA) 1,936 px x 1,216 px (2.35 Mpixel, 16:10, 2 MP) 2,048 px x 2,048 px (4.19 Mpixel, 1:1, 4 MP)
Light source	External illumination To be ordered separately as accessories
Lens	C-mount
Optical format	1/1.8" 1/1.2" 1" (depending on type)
Ethernet	✓, UDP/IP
Configuration software	I2D Software Suite
Dimensions	40.5 mm x 29 mm x 29 mm

Product description

The picoCam streaming camera family is ideally suited to applications where space is restricted. So that it can be used in industrial environments, the picoCam has a screw-fit RJ45 GigE interface – the standard for industrial image processing – as well as industry-grade plug connectors for the voltage supply and trigger signals. As an alternative, it is also possible to operate it with just one cable measuring up to 100 m in length using Power over Ethernet (PoE). The picoCam is available with 1, 2, or 4 megapixel resolution and in color, monochrome, or NIR (optional) variants. CMOS image sensors use global shutter technology and enable multiple image sections (AOI). Image recording and transmission are decoupled in the internal 60 MB memory bank and multi-camera applications are therefore supported.

At a glance

- Ultra-compact housing
- Power over Ethernet (PoE)
- Wide-range voltage supply 12 V DC ... 24 V DC
- Screw-fit RJ45 GigE interface
- Screw-fit Hirose plug connector for the voltage supply and digital inputs and outputs
- Color, monochrome, and NIR variants
- Connection for C mount lenses

Your benefits

- The picoCam family is ideal for use on the Sensor Integration Machine (SIM), to support complex image processing tasks
- Ideal for multi-camera applications, e.g., several picoCams on the SIM
- Simple operation using just one connecting cable thanks to PoE
- Reliable, even in very tight spaces
- Intuitive operation via the I2D Software Suite for Windows from SICK
- Simple plug and play installation on the SIM thanks to pre-assembled cables
- Wide range of C mount lenses available

Fields of application

- Single or multi-camera systems in conjunction with the Sensor Integration Machine (SIM)
- Automated image processing applications in the automotive, robotics, electronics, solar, and food and beverage industries, for example, for quality inspection, traceability, and object detection

Ordering information

Other models and accessories → www.sick.com/picoCam

- **Products by tasks:** presence inspection, quality inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 1,280 px x 1,024 px (1.31 Mpixel)
- **Sensor:** CMOS monochrome
- **Sensor used:** e2V EV76C560ABT
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient op- erating tem- perature min.	Ambient op- erating tem- perature max.	Type	Part no.
picoCam	50 fps, in freerun mode 48 fps, in trigger mode	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D301M-RCA11	6060388

- **Products by tasks:** presence inspection, quality inspection, Color inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 1,280 px x 1,024 px (1.31 Mpixel)
- **Sensor:** CMOS Color
- **Sensor used:** e2V EV76C560ACT
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient op- erating tem- perature min.	Ambient op- erating tem- perature max.	Type	Part no.
picoCam	50 fps, in freerun mode 48 fps, in trigger mode	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D301C-RCA11	6060389

- **Products by tasks:** presence inspection, quality inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 1,280 px x 1,024 px (1.31 Mpixel)
- **Sensor:** CMOS monochrome NIR
- **Sensor used:** e2V EV76C661ABT
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient op- erating tem- perature min.	Ambient op- erating tem- perature max.	Type	Part no.
picoCam	50 fps, in freerun mode 48 fps, in trigger mode	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D301N-RCA11	6060390

- **Products by tasks:** presence inspection, quality inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 1,600 px x 1,200 px (1.92 Mpixel)
- **Sensor:** CMOS monochrome
- **Sensor used:** e2V EV76C570ABT
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient oper- ating tem- perature min.	Ambient oper- ating tem- perature max.	Type	Part no.
picoCam	35.6 fps, in freerun mode 34.4 fps, in trigger mode	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D302M-RCA11	6060391

- **Products by tasks:** presence inspection, quality inspection, Color inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 1,600 px x 1,200 px (1.92 Mpixel)
- **Sensor:** CMOS Color
- **Sensor used:** e2V EV76C570ACT
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient oper- ating tem- perature min.	Ambient oper- ating tem- perature max.	Type	Part no.
picoCam	35.6 fps, in freerun mode 34.4 fps, in trigger mode	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D302C-RCA11	6060392

- **Products by tasks:** presence inspection, quality inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 1,936 px x 1,216 px (2.35 Mpixel)
- **Sensor:** CMOS monochrome
- **Sensor used:** Sony IMX249LLJ-C
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient oper- ating tem- perature min.	Ambient oper- ating tem- perature max.	Type	Part no.
picoCam	41 fps	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D303M-RCA11	6060394

- **Products by tasks:** presence inspection, quality inspection, Color inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 1,936 px x 1,216 px (2.35 Mpixel)
- **Sensor:** CMOS Color
- **Sensor used:** Sony IMX249LQJ-C
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient oper- ating tem- perature min.	Ambient oper- ating tem- perature max.	Type	Part no.
picoCam	41 fps	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D303C-RCA11	6060395

- **Products by tasks:** presence inspection, quality inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 2,048 px x 2,048 px (4.19 Mpixel)
- **Sensor:** CMOS monochrome
- **Sensor used:** CMOSIS CMV4000-3E5M1PP
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient op- erating tem- perature min.	Ambient op- erating tem- perature max.	Type	Part no.
picoCam	19 fps	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D304M-RCA11	6060396

- **Products by tasks:** presence inspection, quality inspection, Color inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 2,048 px x 2,048 px (4.19 Mpixel)
- **Sensor:** CMOS Color
- **Sensor used:** CMOSIS CMV4000-3E5C1PP
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient op- erating tem- perature min.	Ambient op- erating tem- perature max.	Type	Part no.
picoCam	19 fps	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D304C-RCA11	6060397

- **Products by tasks:** presence inspection, quality inspection, measuring, 2D, positioning
- **Internal lighting:** (To be ordered separately as accessories.)
- **Lens:** C-mount
- **Sensor resolution:** 2,048 px x 2,048 px (4.19 Mpixel)
- **Sensor:** CMOS monochrome NIR
- **Sensor used:** CMOSIS CMV4000-3E12M1PP
- **Product group:** pico- und midiCam series

Product family	Scan/frame rate	Configura- tion software	Ambient op- erating tem- perature min.	Ambient op- erating tem- perature max.	Type	Part no.
picoCam	19 fps	I2D Software Suite	≥ 0 °C	≤ +40 °C	I2D304N-RCA11	6060398

SICK AT A GLANCE

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com