

EventCam GET A BETTER PERSPECTIVE – With the EventCam from SICK



MultiTask Sensor

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Why has there been a fault in the production process? Why has my scanner triggered?

Want to find out the answers to these questions, without having to physically monitor the production process yourself?

If so, look no further than the SICK EventCam, which uses real video footage and images to help you identify the cause. The SICK EventCam supplies an image or video of a defined time period, occurring immediately before or after a trigger signal. Information on the cause of protective field violations or why material was rejected ensure greater process transparency and increase system throughput.

The camera integrates seamlessly into SICK's industrial sensor technology, and data can be transmitted directly via FTP to a server and stored inside the camera itself.





Areas of application

- Diagnosis during operation to increase productivity: If a machine stops unexpectedly due to the triggering of a protective device (e.g. a safety laser scanner), the SICK EventCam helps find the cause.
- Greater process transparency: Photoelectric sensors are used for a variety of detection tasks, e.g., simple property checks. With the help of the event-controlled camera, you can now receive additional visual information about the rejected material.

Your Benefits

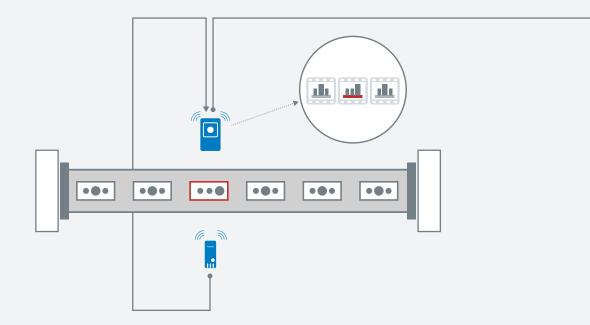
- Event tracking possible
- No data flood the only data that needs to be analyzed is data taken from the relevant time period, before and after an event
- Remote analysis and quick setup data access and individual configuration of the camera via SOPAS Air
- Comprehensive detection angle of approx. 44° at highest resolution possible
- Flexible data backup data transmission via FTP to a server or directly onto the camera's internal memory
- Reliable data transmission industry standard, wired network connection (10/100 Mbit) to a selected IP address on the company network
- Reduced cabling an external trigger, e.g., a sensor, can be connected directly to the camera

TARGETED PROCESS OPTIMIZATION IN DETECTION TASKS

Additional visual information for improved quality

Photoelectric sensors are used for a variety of detection tasks, including simple property checks. Sensors such as the KT Mini contrast sensor check print marks, while the WTT12L photoelectric proximity sensor is used to check the profile. For simple quality control processes, these sensors are cost-effective and user-friendly alternatives to conventional camera solutions. If an error needs to be analyzed in more detail, the machine operator has to examine the material on site. Thanks to the EventCam, extra visual information about the material is now available wherever you are.

The SICK EventCam is particularly helpful when identifying the optimum configuration for new production facilities or improving the quality of existing processes and reducing downtime.



ADVANCED DIAGNOSTICS FOR PROTECTIVE DEVICES

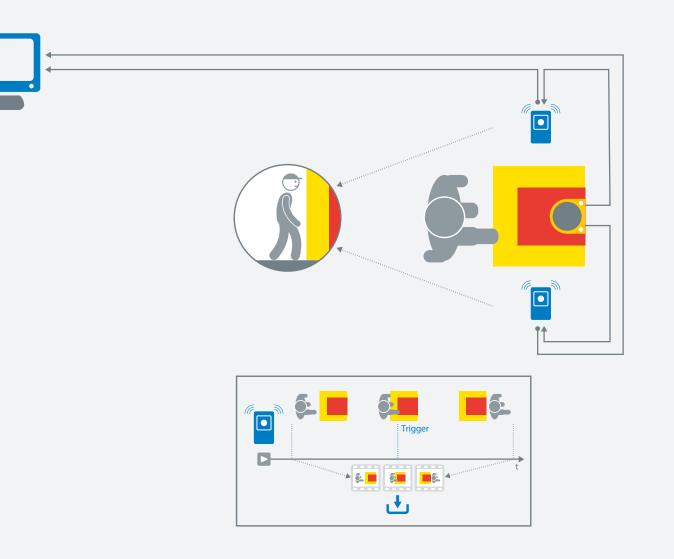
Higher plant availability thanks to simple/rapid analysis

Protective devices, such as safety laser scanners, are used to protect people at dangerous machines. If a person enters the hazardous area, the protective device stops the machine.

If the machine stops repeatedly and unexpectedly, the SICK EventCam can provide a rapid, purposeful diagnosis of the

situation. The recorded image or video sequences allow the person responsible for the system to identify the disturbance visually and take appropriate corrective measures.

With several event cameras, the situation can be recorded and analyzed as a whole from different perspectives.



Detailed technical data

Performance

| | Picture mode | Video mode | | |
|-----------------------------------|--|---|--|--|
| Camera resolutions and framerates | up to 15 fps (2592x1944, QSXGA) | 15 or 30 fps (1920x1080, 1080p) 15 or 45 fps (1280x720, 720p) 13 or 65 fps (800x600, SVGA) | | |
| Spectral properties | RGB | | | |
| Horizontal FOV | 44° at QSXGA 34° at 1080p 44° at 720p 28° at SVGA | | | |
| Vertical FOV | 34° at QSXGA 19° at 1080p 25° at 720p 21° at SVGA | | | |
| Diagonal FOV | 53° at QSXGA 38° at 1080p 50° at 720p 35° at SVGA | | | |
| Working range | 0,4 m 0,6 m (type EVC625-CCOVAL5L) 0,8 m 6,0 m (type EVC625-CCOXAL5L) | | | |
| Internal storage capacity | 35 to 1000 events on internal memory depend | ling on mode, resolution and frame rate | | |
| Event duration | Max. number of pictures before/after trigger (event duration depends on the recording frequence, allowed image recording settings 15 image/sec. up to 1 image/hour) | Video duration in seconds before/after trigger | | |
| | 25 / 25 (QSXGA) 50 / 50 (1080p) 80 / 80 (720p) 120 / 120 (SVGA) | 25 / 15 (30 fps, 1080p) 50 / 30 (15 fps, 1080p) 40 / 20 (45 fps, 720p) 120 / 60 (15 fps, 720p) 60 / 20 (65 fps, SVGA) 240 / 100 (13 fps, SVGA) | | |
| Trigger | Hard-wired digital input or manual trigger in SOPAS Air | | | |
| White balance | Manual | | | |
| Internal Illumination | No | | | |
| Exposure control | Automatic or manual | | | |
| Muting | Muting per button, via configuration software of | or hard-wired | | |

Data interfaces

| | Picture mode | Video mode | | |
|------------------------|------------------------------------|------------|--|--|
| Configuration software | SOPAS Air (browser based) | | | |
| Data access | SOPAS Air (browser based) | | | |
| Ethernet connection | 100 Mbit/s TCP/IP | | | |
| Default network IP | 192.168.0.30 | | | |
| Data storage | FTP upload and/or internal storage | | | |
| Picture / video format | jpg H.264 | | | |

Mechanics/electronics

| Housing material | Aluminum die cast |
|-----------------------------------|---|
| Material reading window | Plastic (PMMS) 2 mm thick, scratch resistant coated |
| Housing colour | Light blue (RAL 5012) |
| Dimensions | 71 mm x 43 mm x 35.6 mm |
| Weight | 170 g |
| Protection class | III |
| Enclosure rating | IP65 |
| Supply voltage | 24V DC +/-20 % SELV |
| Output current per digital output | ≤ 50 mA |
| Power consumption | Typ. 4 W |
| Electrical connection | M12, 17-pin male connector |
| Ethernet connection | M12, 4-pin Ethernet female connector |

Ambient data

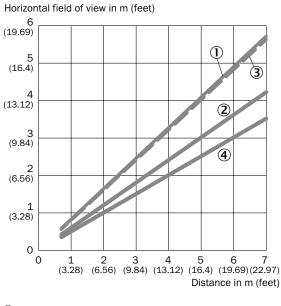
| Ambient operating temperature | 0 °C +40 °C ¹⁾ 0 °C + 35 °C ²⁾ |
|-------------------------------------|--|
| Ambient storage temperature | -20 °C +70 °C |
| Rel. humidity | 90 %, non-condensing |
| Electromagnetic compatibility (EMC) | Electromagnetic immunity: EN 61000-6-2 / Radiated emission: EN 61000-6-3 |

¹⁾ For SVGA/720p < 15fps and image mode QSXGA/1080p < 5fps for side mounting with mounting plate 2042902.

 $^{\scriptscriptstyle 2)}$ For all other modes with side mounting with mounting plate 2042902.

Field of view

Far range variant



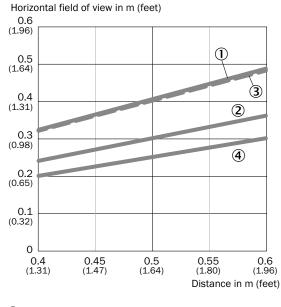
① QSXGA

2 1080p

3 720p

④ SVGA

Close range variant



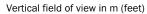
① QSXGA

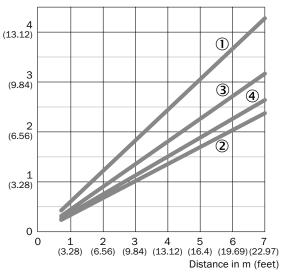
② 1080p
③ 720p

3 720p

④ SVGA

Far range variant

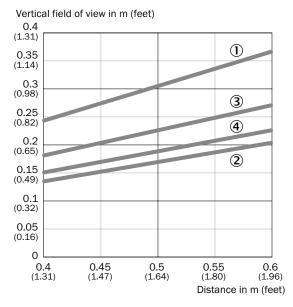






④ SVGA

Close range variant



QSXGA
 1080p
 720p

4 SVGA

Ordering information

| Туре | Part no. |
|-------------------------------|----------|
| EVC625-CC0XAL5L ¹⁾ | 1093139 |
| EVC625-CCOVAL5L 2) | 1102028 |

 $^{\rm 1)}$ Far range variant for working range 0,8 m \dots 6 m. $^{\rm 1)}$ Close range variant for working range 0,4 m \dots 0,6 m.

Recommended accessories

Connection systems

Modules

| Brief description | Туре | Part no. |
|---|------------|----------|
| Small connection module for one sensor, 4 cable glands, base for CMC600 | CDB620-001 | 1042256 |

Plug connectors and cables

| | Signal type/ application | Connection type head A | Connection type head B | Cable | Cable length | Part no. |
|-----|-----------------------------|---|--|--|--------------|----------|
| No. | | Male connector, M12, 4-pin, straight, D-coded | Male connector, RJ45, 8-pin, straight | 4-wire, drag chain use, AWG26 | 2 m | 6034414 |
| | Power, digital I/Os | Female connector, M12, 17-pin, straight | Male connector, D-Sub-HD, 15-pin, straight | To connection module CDx (except CDB650) | 2 m | 2055419 |
| | – M: | Female connector, M12, 17-pin, | Cable | 17-wire, suitable for 2A, adapted | 3 m | 2070425 |
| | | | | color coding of open conductor heads, | 5 m | 2070426 |
| | | | | drag chain use, stripped | 10 m | 2070427 |
| No. | | straight, A-coded | | Drag chain use, suitable for 2A, suitable for refrigeration | 5 m | 2075220 |

Mounting systems

Mounting brackets and mounting plates

| Brief description | Part no. |
|----------------------------|----------|
| Bracket with adapter board | 2042902 |

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SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for industrial applications. With more than 8,800 employees and over 50 subsidiaries and equity investments as well as numerous agencies worldwide, SICK is always close to its customers. 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.

SICK has extensive experience in various industries and understands their processes and requirements. With intelligent sensors, SICK delivers exactly what the 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 SICK a reliable supplier and development partner.

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

That is "Sensor Intelligence."

Worldwide presence:

Australia, Austria, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Hong Kong, India, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Poland, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, USA, Vietnam.

Detailed addresses and further locations → www.sick.com

