



Quick Start Guide
VCXG cameras (Gigabit Ethernet)

Download latest camera software:
www.baumer.com/vision/software

Download latest technical documentation:
www.baumer.com/cameras/docs

Safety

Conformity



We declare, under our sole responsibility, that the described Baumer VCXG cameras conform with the directives of the CE.



Several of the described Baumer VCXG cameras conform with the directives of the Korean Conformity.

Please refer for the User's Guide or technical documentation.

Safety Precautions

Notice
See the User's Guide for the complete safety instructions!

Caution
Observe precautions for handling electrostatically sensitive devices!

- Protect the sensor from dirt and moisture.
- Do not allow the camera to become contaminated with foreign objects.

Environmental Requirements

Storage temp.	-10 °C ... +70 °C
Operating temp.	see Heat Transmission
Humidity	10 % ... 90 % Non-condensing

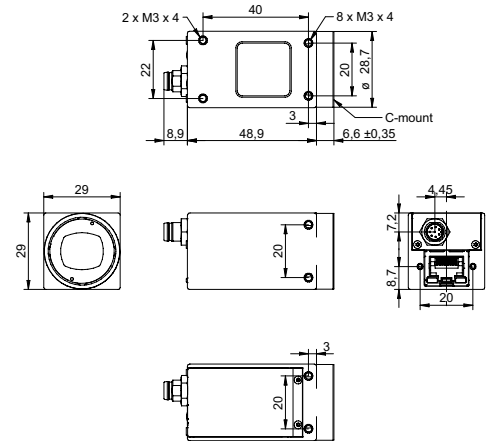
Product Specification

VCXG cameras – Extensive functionality and high frame rates

- up to 20 megapixel, monochrome and color
- up to 595 fps
- 29 × 29 mm housing with all-sided M3 mounting
- Global shutter architecture for minimized motion blur
- Rolling shutter sensors with Global Reset for cost effective applications
- Camera temperature range up to 65 °C (149 °F)
- Power supply: 12 – 24 V externally or PoE
- GigE Vision™ standard compliant

Notice
Further technical details are available in the respective data sheets.

Dimensions



System Requirements

	Single-camera system Recommended	Multi-camera system Recommended
CPU	Intel® Core™ i5-2520M CPU @ 2.50 GHz, Cores: 4	Intel® Core™ i7-3770 CPU @ 3.40 GHz, Cores: 8
RAM	4 GB	8 GB
Operating system	Microsoft® Windows® 7 (32 / 64 bit systems) Microsoft® Windows® 8 (32 / 64 bit systems)	
(OS)	Microsoft® Windows® 10 (32 / 64 bit systems)	

Installation

Lens mount

Notice
Ensure the sensor and lens are not contaminated with dust and airborne particles when mounting the support or the lens to the device!

The following points are very important:

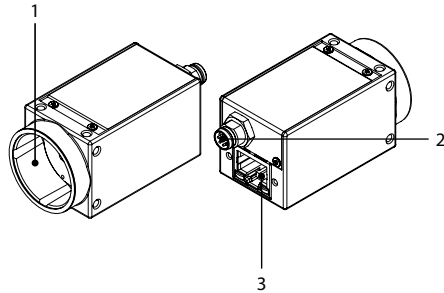
- Install the camera in an environment that is as dust free as possible!
- Keep the dust cover (bag) on the camera for as long as possible!
- Hold the camera with the sensor downwards if the sensor is uncovered.
- Avoid contact with any of the camera's optical surfaces!

Further Information
For further information about our products, please visit www.baumer.com
For technical issues, please contact our technical support:
support.cameras@baumer.com · Phone +49 (0)3528 4386-845 · Fax +49 (0)3528 4386-86

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Technical data has been fully checked, but accuracy of printed matter is not guaranteed.
The information in this document is subject to change without notice.

General Description



No.	Description	No.	Description
1	Lens mount (C-mount)	3	Ethernet port (PoE) / Signaling LED's
2	Power Supply / Digital-IOs		

Data Interface / Digital IOs

8P8C mod jack with LEDs



1	MX1+	5	MX3-
2	MX1-	6	MX2-
3	MX2+	7	MX4+
4	MX3+	8	MX4-

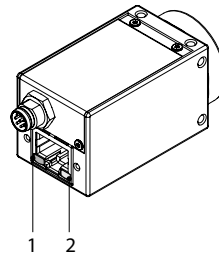
Power supply / Digital-IOs (on camera side)

M8 / 8 pins / wire colors of the connecting cable (ordered separately)



1	GPIO (Line2)	white	5	Power VCC OUT1	grey
2	Power V _{CC}	brown	6	OUT1 (Line3)	pink
3	IN1 (Line0)	green	7	GND (Power, GPIO)	blue
4	GND IN1	yellow	8	GPIO (Line1)	red

LED Signals



LED	Signal	Meaning
1	green	link active
	green flash	receiving
2	yellow static	error
	yellow flash	transmitting

Power Supply

Power Supply

Power V _{CC}	12 ... 24 VDC ± 20%
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Notice

The camera supports PoE (Power over Ethernet) IEEE 802.3af Clause 33, 48 V power supply.

If the camera is simultaneously powered by the Power supply / Digital-IO port and the Ethernet port (PoE), then the power supply via the Power supply / Digital-IO port is prioritized.

Heat Transmission

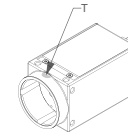
Caution

Heat can damage the camera. Heat must be dissipated adequately to ensure that the temperatures do not exceed the values in the table below.



As there are numerous possibilities for installation, Baumer recommends no specific method for proper heat dissipation, but suggest the following principles:

- operate the cameras only in mounted condition
- mounting in combination with forced convection may provide proper heat dissipation

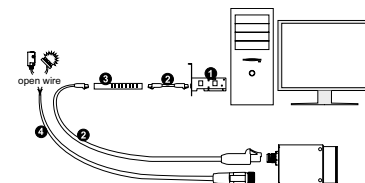


Measurement Point	Maximum Temperature
Measurement Point (T)	65 °C (149 °F)

Installation

Installation of the camera:

- without PoE:** Connect the camera using an appropriate cable (at least Cat-5e) to the GigE board on your PC.
- PoE:** Connect the camera using an appropriate cable (at least Cat-5e) to a free port of a PoE capable ethernet switch. Establish the connection between switch and GigE board on your PC.
- If required, connect a trigger and / or flash to process interface.
- Connect the camera to power supply.



Installation sample

- PCI board
- GigE cable
- PoE capable ethernet switch or Baumer PoE components
- Cable for trigger and flash