

Quick Start Guide  
VCXG.XC cameras (Gigabit Ethernet)

Download latest camera software:  
[www.baumer.com/vision/software](http://www.baumer.com/vision/software)

Download latest technical documentation:  
[www.baumer.com/cameras/docs](http://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.

**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

**Further Information**

For further information about our products, please visit [www.baumer.com](http://www.baumer.com)  
For technical issues, please contact our technical support:  
[support.cameras@baumer.com](mailto: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.

**Product Specification**

**VCXG.XC cameras – Extensive functionality and high frame rates**

- internal cooling pipe for cooling with compressed air or tempering liquid
- 36 × 36 mm housing with all-sided M3 mount
- Camera temperature range up to 65 °C (149 °F)
- Power supply: 12 – 24 V externally or PoE
- GigE Vision™ standard compliant

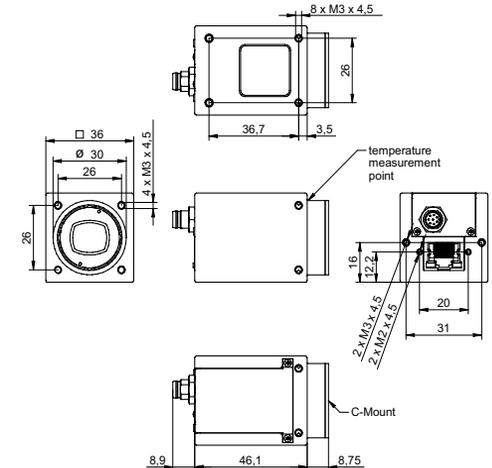
**Notice**

Further technical details are available in the respective data sheets.

**System Requirements**

	<b>Single-camera system Recommended</b>	<b>Multi-camera system Recommended</b>
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)	

**Dimensions**



**Installation**

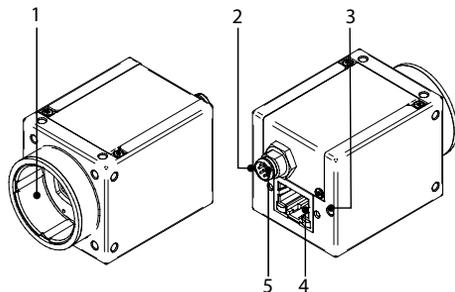
**Lens mount**

**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!

## General Description



No.	Description	No.	Description
1	Lens mount (C-mount)	4	Ethernet port (PoE) / Signaling LED's
2	Cooling pipe intake (M3)	5	Power Supply/Digital-I/Os
3	Cooling pipe outlet (M3)		

## 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-

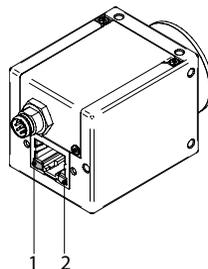
### Power supply / Digital-I/Os (on camera side)

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



1	GPIO (Line2)	white	5	Power VCC OUT1	grey
2	Power V <sub>CC</sub>	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 <sub>CC</sub>	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-I/O port and the Ethernet port (PoE), then the power supply via the Power supply / Digital-I/O 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

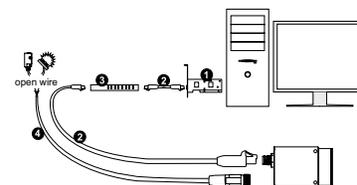


Measurement Point	Maximum Temperature
Measurement Point (T)	65 °C (149 °F)

## 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