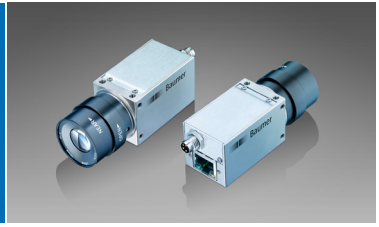
Baumer



Quick Start Guide
VEXG Cameras (Gigabit Ethernet)

Latest software version and technical documentation available at:

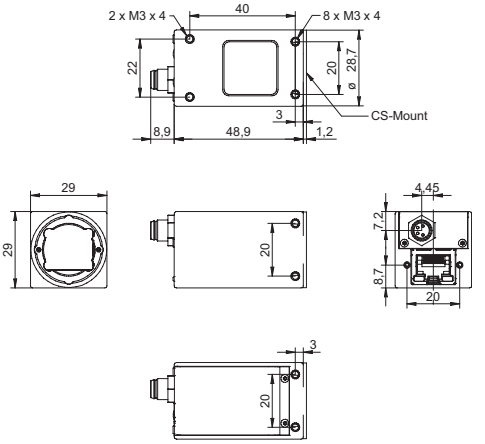
www.baumer.com/vision/login

Product Specification

Camera Type	Sensor Size	Resolution	Full Frames [max. fps]
Monochrome			
VEXG-02M	1/4"	640 x 480	217
VEXG-13M	1/2"	1280 x 1024	61
Color			
VEXG-02C	1/4"	640 x 480	217
VEXG-13C	1/2"	1280 x 1024	61

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

Dimensions



Safety

Conformity:
CE, RoHS

CE

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

RoHS

All VEXG cameras comply with the recommendation of the European Union concerning RoHS Rules.

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

System Requirements

	Single-camera system Recommended	Multi-camera system Recommended
CPU	Intel(R) Core(TM) i5-2520M CPU @ 2.50GHz, Cores: 4	Intel(R) Core(TM) i7-3770 CPU @ 3.40GHz, Cores: 8
RAM	4 GB	8 GB
Operating system (OS)	Microsoft® Windows® 7 32 / 64 bit systems Microsoft® Windows® 8 32 / 64 bit systems 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 4386-0 · Fax +49 (0)3528 4386-86
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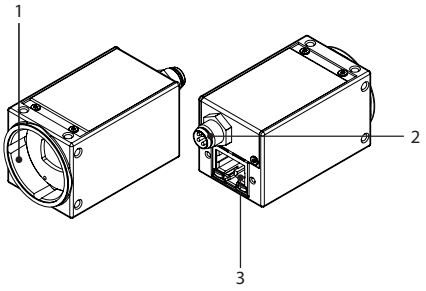
GiGE VISION

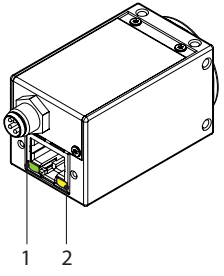
GENICAM

General Description



No.	Description	No.	Description
1	Lens mount (C-Mount)	3	Ethernet Port (PoE) / Signaling LED´s
2	Power Supply / Digital IO		

LED signals



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

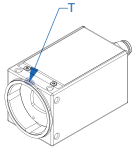
Heat Transmission

Caution

Heat can damage the camera. Heat must be dissipated adequately to ensure that the temperature does 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)

Data Interface / Digital IOs

8P8C mod jack with LEDs

1	green/white	MX1+	(negative / positive V_{port})
2	green	MX1-	(negative / positive V_{port})
3	orange/white	MX2+	(positive / negative V_{port})
4	blue	MX3+	
5	blue/white	MX3-	
6	orange	MX2-	(positive / negative V_{port})
7	brown/white	MX4+	
8	brown	MX4-	

Power Supply / Digital IOs (on camera side)
wire colors on connecting cable (ordered separately)

1	VCC (Power and OUT)	brown	3	GND (Power and IN)	blue
2	IN+	white	4	OUT	black

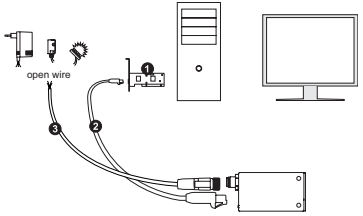
Power Supply

Power Supply	
Power VCC	12 V DC ± 20%

Installation

Installation of the camera:

- Connect the camera using an appropriate cable (at least Cat-5e) to the GigE board on your PC.
-
- If required, connect a trigger and / or flash to process interface.
- Connect the camera to power supply.



Installation sample
1 - PCI board
2 - GigE cable
3 - Power cable / Digital-IO