Baumer

Quick Start Guide
VQXT cameras (10 Gigabit Ethernet)

Latest software version and technical documentation are available at:

vt.baumer.com

Product Specification

VQXT cameras – Extremely high resolution and speed

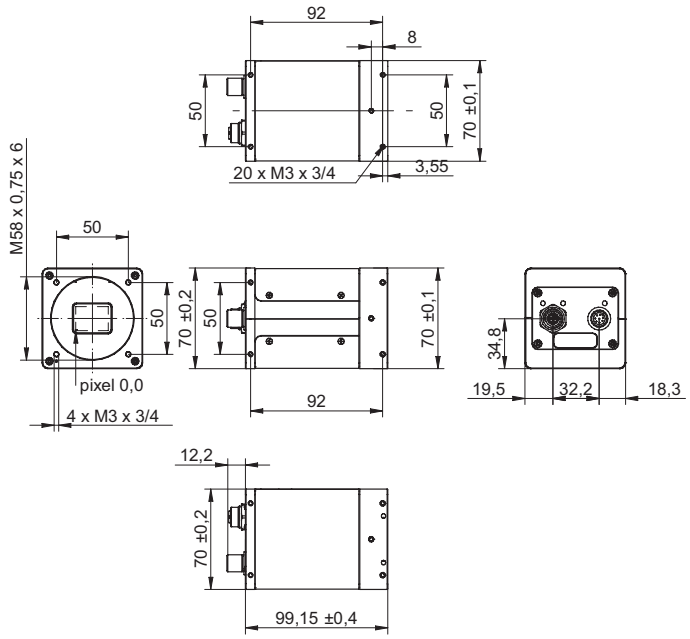
- 10 Gigabit Ethernet progressive scan CMOS camera
- GigE Vision® standard compliant
- High-speed imaging with burst mode
- Global shutter architecture for minimized motion blur
- External synchronization via industrial compliant process interface (trigger / flash)
- Very robust M12 connectors
- Camera parameter programmable in real-time

Notice

Further technical details are available in the respective data sheets.

10 GiGE VISION

Dimensions



Conformity / Safety

Conformity

CE

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

RoHS REACh compliant

All VQXT 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

Further Information

For further information on our products 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

System Requirements

	Recommended for 1 GigE	Recommended for 10 GigE
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 (OS)	Microsoft® Windows® 7 (32 / 64 bit systems) Microsoft® Windows® 8 (32 / 64 bit systems) Microsoft® Windows® 10 (32 / 64 bit systems)	

Installation

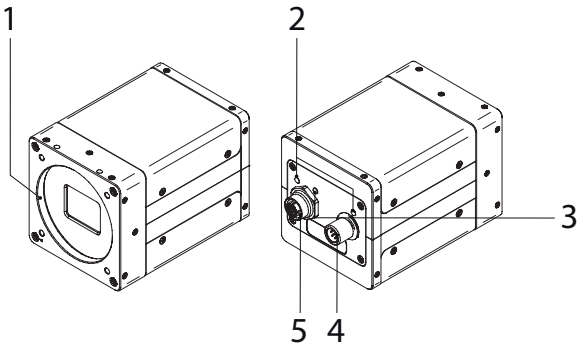
Lens mount

Notice

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

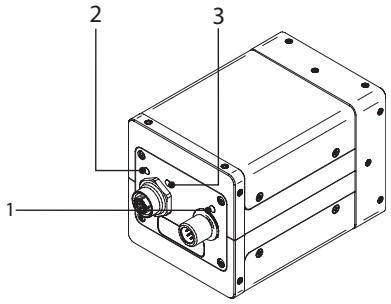
The following points are very important:
- Install the camera in an environment that is as dust free as possible!
- Keep the dust cover (bag) on the camera for as long as possible!
- Hold the camera with the sensor downwards if the sensor is uncovered.
- Avoid contact with any of the camera's optical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

General Description



No.	Description	No.	Description
1	M58-Mount	4	Power and Process interface
2	GigE LED´s	5	Data interface
3	Camera LED		

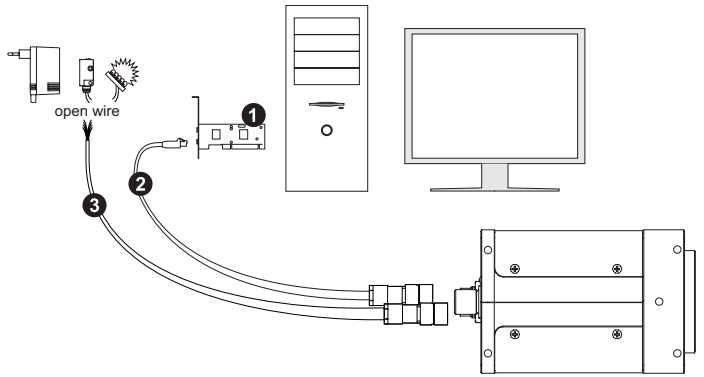
LED Signaling



			Signal	Meaning
LED	1	GigE LED	Green On	Link 10 Gbit
			Green Blinking	Link 10 Gbit in EEE Mode
	2	GigE LED	Yellow On	Link 1 Gbit
			Yellow Blinking	Link 1 Gbit in EEE Mode
	3	Camera LED	Off	Power Off
			Green On	Power on, no Readout
			Blinking (green - yellow)	Readout active
			Red blinking	Update in progress (Don´t switch off!)

Installation

Installation sample **(Gigbit Ethernet / 10-Gigabit Ethernet)**



1 - network interface card (Gigbit Ethernet / 10 Gigabit Ethernet)
2 - network cable
3 - Process interface- / Power cable

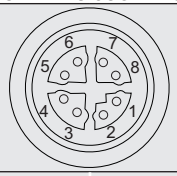
Data Interfaces

Notice

You can operate the camera on a GigE connection instead of a 10GigE connection. This reduces the performance.

Ethernet

(SACC-CI-M12FS-8CON-L180-10G)



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

Power and Process Interface

Power supply / Digital-IO

(SACC-CI-M12MS-8CON-SH TOR 32)

wire colors of the connecting cable* (ordered separately)

1	white	IN2 (Line 1)	5	grey	I/O Power VCC
2	brown	Power VCC+	6	pink	OUT 1 (Line 2)
3	green	IN 1 (Line 0)	7	blue	GND (Power)
4	yellow	GND I/O	8	red	OUT 2 (Line 3)

*) shielded cable needs to be used

Power Supply

Power VCC	12 VDC ... 24 VDC ± 20 %

Heat Transmission

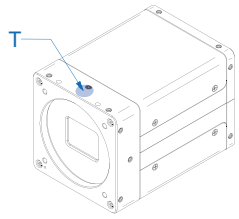
Caution

Provide adequate dissipation of heat, to ensure that the temperature does not exceed the values in the table below.

The surface of the camera may be hot during operation and immediately after use. Be careful when handling the camera and avoid contact over a longer period.

As there are numerous possibilities for installation, Baumer do not specify a 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



Measure Point	Maximal Temperature
T	+65 °C (149 °F)
internal Temperature Sensor	+75 °C (167 °F)