

Quick Start Guide VEXU Cameras (USB 3.0)

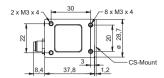
Latest software version and technical documentation available at:

www.baumer.com/vision/login

Camera Type	Sensor Size	Resolution	Full Frames [max. fps]
Monochrome			
VEXU-24M	1/1.2"	1920 x 1200	38
Color			
VEXU-24C	1/1.2"	1920 x 1200	38

Notice

Further technical details are available in the respective data sheets.











Safety

Conformity: CE, RoHS





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

## RoHS

CE

All VEXU 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!



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

torage temp.	-10°C +70°C
perating temp.	see Heat Trans-
	mission
lumidity	10 % 90 %
	Man annihilation

System Requirements

	Single-camera system	Multi-camera system	
	Recommended	Recommended	
CPU	Intel(R) Core(TM) i5-2520M	Intel(R) Core(TM) i7-3770 CPU @	
	CPU @ 2.50GHz, Cores: 4	3.40GHz, Cores: 8	
RAM	4 GB	8 GB	
Operating	Microsoft® Windows® 7 32 / 64 bit systems (required for USB 3.0)		
system	Microsoft® Windows® 8 32 / 64 bit systems (required for USB 3.0)		
(OS)	Microsoft® Windows® 10 32 / 64 bit systems (required for USB 3.0)		

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!

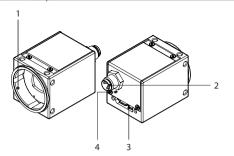
Further Information

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 - Baumer Optonic GmbH - Badstrases 30 - Die-10454 Radeberg, Germany Technical data has been fully checked, but accuracy of printed matter is not guaranteed. Subject to change without notice. Printed in Germany 061f6. • 1.0 - 11164079





General Description



No.	Description	No.	Description
1	Lens mount (CS-Mount)	4	LED
2	Digital IO		
3	USB 3.0 port		

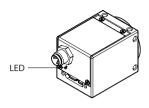
Data Interface / Digital IOs

USB 3.0 (Micro B)				
12345 678910				
1	VBUS	6	MicB_SSTX-	
2	D-	7	MicB_SSTX+	
3	D+	8	GND_DRAIN	
4	ID	9	MicB_SSRX-	
5	GND	10	MicB_SSRX+	

Digital IOs (on camera side)
wire colors of the connecting cable (ordered separately)

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			100	4		
1	VCC (Out)	brown		3	GND (IN)	blue
2	IN+	white		4	OUT	black

LED signals

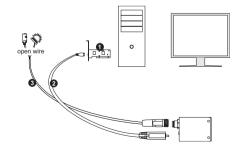


	Signal	Meaning
	green flash	Power on
	green	USB 3.0 connection
LED	red	USB 2.0 connection
	yellow	Readout active
	red flash	Update

#### Installation

### Installing the camera:

- Connect the camera to the USB connection on your PC using an appropriate cable.
- If required, connect a trigger and / or flash to the digital IOs.



Installation example

- 1 PCI USB board
- 2 USB cable
- 3 Cable for trigger and flash

**Heat Transmission** 

## A

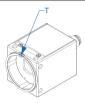
#### Caution

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)

Troubleshooting

- 1. Check camera operation using the LED signals.
- → If LED is red:
  - · Camera is connected to USB 2.0 (settings possible).
- 2. Check connection using Windows Device Manager:
- → If device is not listed:
  - · Check the host controller power supply.
  - . Check USB 3.0 cable and connection.
- → If device is regularly not listed
  - Check USB 3.0 driver installation.