Baumer

Quick Start Guide
VisiLine cameras (Gigabit Ethernet)

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

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

Product Specification

VisiLine– Innovative functionality

- Flexible assembly
- RGB and YUV interpolation algorithms on board
- Bandwidth up to 1000 Mbit/sec for fast multi-camera operation
- Flexible system architecture due to cable length up to 100 m
- Baumer driver for reliable image transfer
- PoE (Power over Ethernet)

Camera Type	Sensor Size	Resolution	Full Frames [max. fps]
CCD Sensor (monochrome / color)			
VLG-02M / VLG-02C	1/4"	656 x 490	160
VLG-12M / VLG-12C	1/3"	1288 x 960	42
VLG-20M / VLG-20C	1/1.8"	1624 x 1228	27
CMOS Sensor (monochrome / color)			
VLG-03M / VLG-03C	1/3"	640 x 480	376
VLG-22M / VLG-22C	2/3"	2044 x 1084	55
VLG-23M / VLG-23C	1/1.2"	1920 x 1200	53
VLG-24M / VLG-24C	1/1.2"	1920 x 1200	38.5
VLG-40M / VLG-40C	1"	2044 x 2044	29

Dimensions (except VLG-23M / VLG-23C, VLG-24M / VLG-24C)
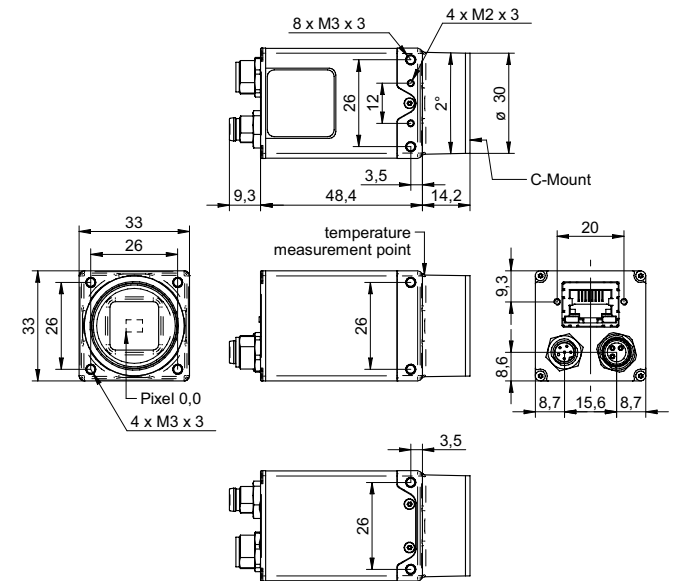
Conformity / Safety

Conformity

CE

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

RoHS COMPLIANT

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

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

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

Safety instructions

> **Notice**
> See User´s Guide for the complete safety instructions!

- Protect the sensor from dirt and moisture.
- Never open the camera housing.
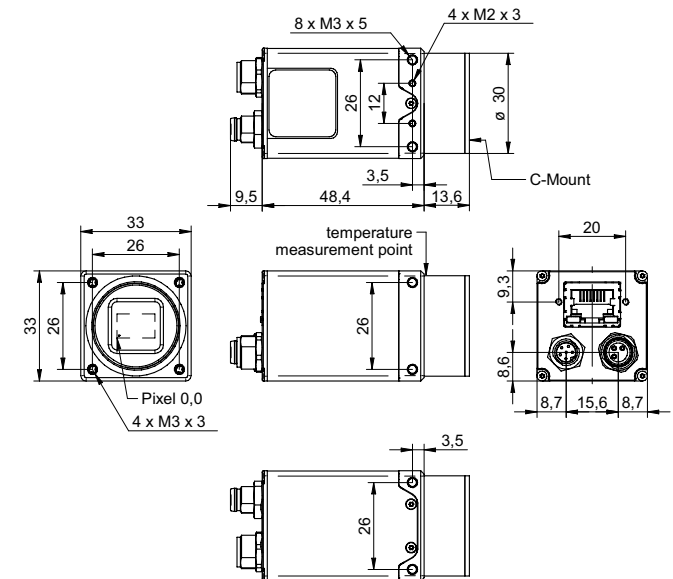- Avoid camera contamination by foreign objects.

Environmental requirements:

Storage temp.	-10 °C ... +70 °C (14 °F...158 °F)
Operating temp.	+5 °C ... +60 °C (41 °F...140 °F)
Housing temp.	max. +65 °C (max. 149 °F)
Humidity	10 % ... 90 % Non-condensing

System Requirements

	Single-camera system		Multi-camera system	
	Minimum	**Recommended**	**Minimum**	**Recommended**
CPU	Intel® Pentium®4 or comparable processor	Intel® Core™ Duo comparable processor		
Clock	2.5 GHz	> 2.5 GHz	2.5 GHz	3 GHz
RAM	1024 MB	2048 MB	2048 MB	> 2048 MB
Operating system (OS)	Microsoft® Windows® XP incl. Service Pack 2 or higher / Microsoft® Windows® XP x64 incl. Service Pack 2 or higher / Microsoft® Windows Vista™ 32 / 64 bit systems / Microsoft® Windows 7 32 / 64 bit systems / Linux® 32 / 64 bit systems from Kernel 2.6.xx			
Graphic	recommended resolution 1280 x 1024, color depth at least 16 bit			
Ethernet	Gigabit Ethernet compliant NIC (recommended Intel® chipset)			
Framework (optional)	Windows® OS: .NET™ Framework 2.0 or higher / Linux® OS: Mono 1.2.4 or higher			

> **Notice**
> Further technical details are available in the respective data sheet.

Dimensions (VLG-23M / VLG-23C, VLG-24M / VLG-24C only)

GiGE VISION   GEN<i>CAM
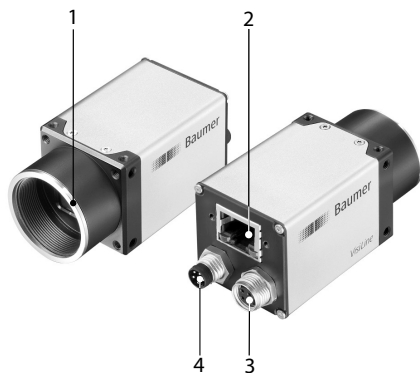
No.	Description	No.	Description
1	C-Mount lens connection	4	Power supply / Digital-IO
2	Ethernet Port		
3	Digital-IO		
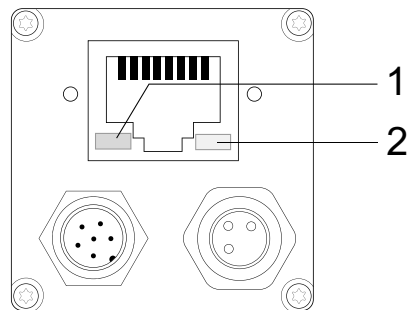
LED	Signal	Meaning
1	green	Link active
	green flash	Receiving
2	yellow	Transmitting

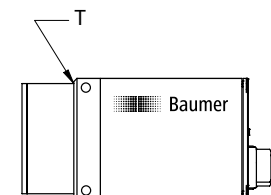| ⚠	Caution
	Heat can damage the camera. Provide adequate dissipation of heat, to ensure that the temperature does not exceed the value in the table below.
	As there are numerous possibilities for installation, Baumer does not specify a specific method for proper heat dissipation.

Measure Point	Maximal Temperature
T	50°C (122°F)

Notice

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

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-IO

wire colors of the connecting cable

1	Power V_{CC}	brown		1	not used	brown
2	IN 1	white		3	OUT 2	blue
3	GND	blue		4	OUT 3	black
4	OUT 1	black				
5	U_{ext} OUT	grey				
6	GND IN	pink				

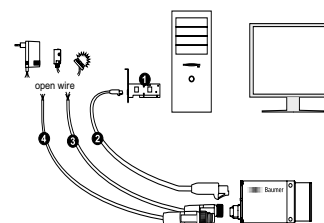**Notice**

The electrical data are available in the respective data sheet.

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; 4 - Digital-IO

Installation of cameras with 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.
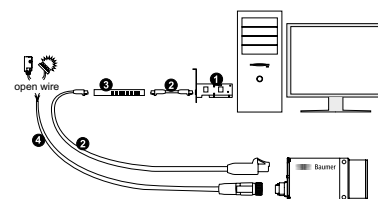
Installation sample
1 - PCI board;
2 - GigE cable;
3 - PoE capable ethernet switch or Baumer PoE components;
4 - Cable for trigger and flash