

Quick Start Guide
VisiLine IP Cameras (Gigabit Ethernet)

Latest software version and technical documentation are available at:

www.baumer.com/vision/login

Safety

Conformity: CE, RoHS





CE

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

RoHS

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

Safety Precautions

| Notice |
|--|
| See User's Guide for the complete safety instructions! |

- Protect the sensor from dirt and moisture.
- Avoid camera contamination by foreign objects.

Environmental Requirements

| Storage temp. | -25°C +70°C |
|-----------------|-----------------|
| Operating temp. | see Heat Trans- |
| | mission |
| Humidity | 10 % 95 % |
| | Non-condensing |

VisiLine IP - Innovative functionality / flexible installation

Protection class: IP65/67

Product Specification

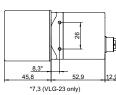
- Flexible assembly
- RGB and YUV interpolation algorithms on board
- Bandwidth up to 1000 Mbit/sec for fast multi-camera operation
- Flexible system architecture due to cable length up to 100 m
- Baumer driver for reliable image transfer
- PoE (Power over Ethernet)

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

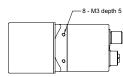
4 - M3 depth 5



Dimensions



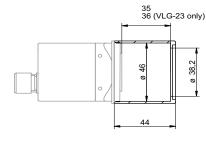




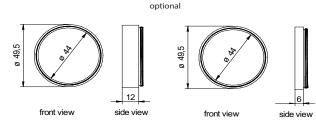
System Requirements

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

Dimensions



Art. No.: 11088325





Art. No.: 11115649

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
Baumer Optronic GmbH · Badstrasse 30 · DE-01454 Radeberg, Germany
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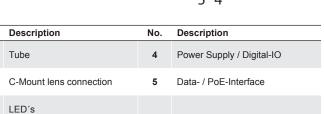
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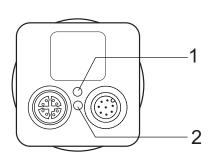




General Description LED Signaling







| LED | Signal | Meaning |
|-----|-------------|----------------|
| | green | Link active |
| 1 | green flash | Receiving |
| | red flash | Transmitting |
| 2 | green | Power |
| | red | Readout active |

Data Interface / Process- / Power-Interface

Notice

No.

3

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

| Data- / PoE- Interface | Process- / Power- Interface |
|--|---------------------------------------|
| (wire colors of the connecting cable*) | (wire colors of the connecting cable) |

| | | | | (3.2.0 (4.08.1) (5.67) | |
|---|-----|--------------|---|------------------------------|--------|
| 1 | D1+ | white/orange | 1 | OUT 3 | white |
| 2 | D1- | orange | 2 | Power VCC+ | brown |
| 3 | D2+ | white/green | 3 | IN1 | green |
| 4 | D2- | green | 4 | IO GND | yellow |
| 5 | D4+ | white/brown | 5 | U _{ext} OUT | grey |
| 6 | D4- | brown | 6 | OUT 1 | pink |
| 7 | D3- | white/blue | 7 | Power GND | blue |
| 8 | D3+ | blue | 8 | OUT 2 | red |

^{*}Phoenix cable / other cable may differ

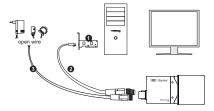
Notice

Further technical details, e.g. the electrical data, are available in the respective data sheets.

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.

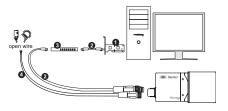


Installation sample

- 1 PCI board; 2 GigE cable;
- 3 Cable for power, trigger and flash

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

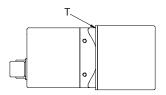
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Caution

Heat Transmission

Heat can damage the camera. Provide adequate dissipation of heat, to ensure that the temperatures does not exceed the value in the table below.

As there numerous possibilities for installation, Baumer do not specifiy a specific method for proper heat dissipation.



| Measure Point | Maximal Temperature |
|---------------|---------------------|
| Т | 50°C (122°F) |
| • | |