Quick Start Guide
SXG cameras (Gigabit Ethernet)

Latest software version and technical documentation are available at:

www.baumer.com/vision/login

Product Specification

### SXG cameras – Maximum Performance with Kodak sensors

- Dual Gigabit Ethernet progressive scan CCD camera
- Compact and lightweight aluminium housing
- Power over Ethernet support
- Standard RJ45 connector
- GigE Vision™ standard compliant
- Excellent image quality at high image rates
- Resolutions of 1, 2, 4 or 8 megapixel
- Frame rates up to 120 fps
- Compact design (52 x 52 x 72 mm)

Camera Type	Sensor Size	Resolution	Full Frames [max. fps]
Monochrome			
SXG10	1/2"	1024 x 1024	120
SXG20	2/3"	1600 x 1200	68
SXG21	2/3"	1920 x 1080	64
SXG40	1"	2336 x 1752	32
SXG80	4/3"	3296 x 2472	16
Color			
SXG10c	1/2"	1024 x 1024	120
SXG20c	2/3"	1600 x 1200	68
SXG21c	2/3"	1920 x 1080	64
SXG40c	1"	2336 x 1752	32
SXG80c	4/3"	3296 x 2472	16

Dimensions

● SXG (C-Mount version)

UNC 1/4-20

16 x M3 depth 6
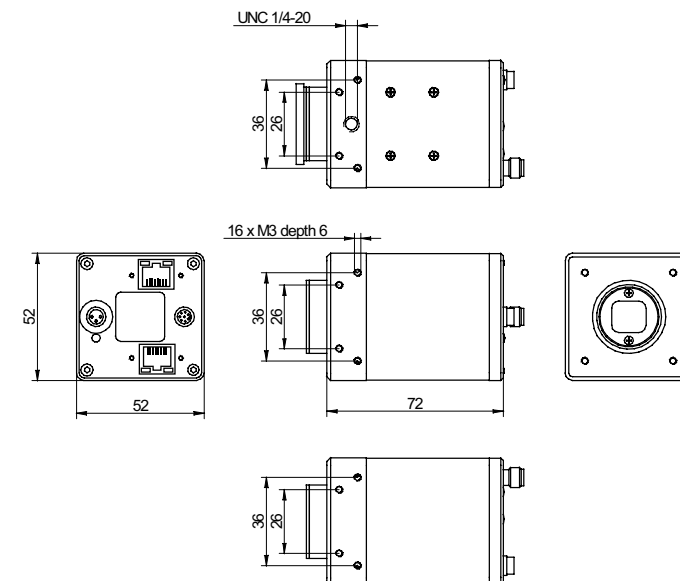
Safety

Conformity:
CE, FCC Part 15 Class B, RoHS

FCC – Class B device

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructios, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occure in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off an on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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
Operating temp.	+5°C ... +60°C
Housing temp.	max. +60°C
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
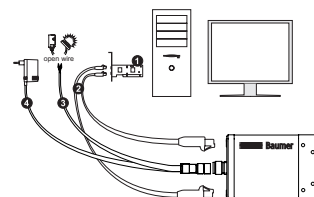© Baumer Optronic GmbH · Badstrasse 30 · DE-01454 Radeberg, Germany
Technical data has been fully checked, but accuracy of printed matter not guaranteed.
Subject to change without notice. Printed in Germany 02/15. v1.4   11054358
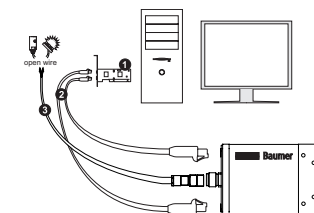
Installation

Installation sample without PoE

1 - network interface card
2 - network cable
3 - Process interface cable
4 - Power cable

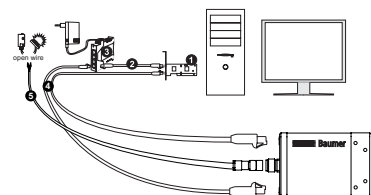Installation sample with PoE via NIC

1 - PoE network interface card (NIC)
2 - network cable
3 - Process interface cable

Installation sample with PoE via Injector

1 - network interface card (NIC)
2 - network cable
3 - Injector
4 - network cable
5 - Process interface cable

Notice
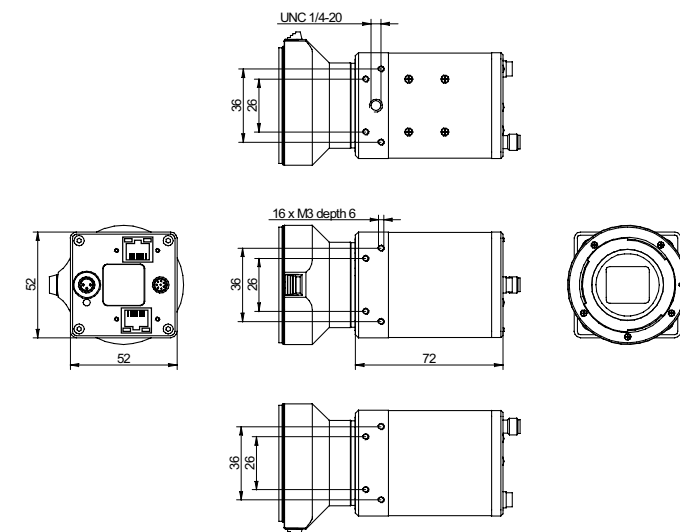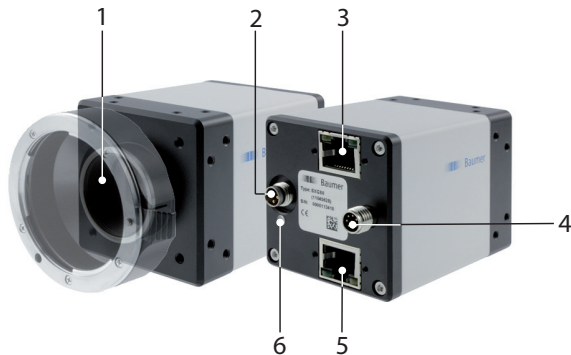Operation with a single GigE link is possible as well.

Dimensions

● SXG-F (F-Mount version)

UNC 1/4-20

16 x M3 depth 6

General Description

Nr.	Description	Nr.	Description
1	(respective) lens mount	4	Digial-IO supply
2	Power Supply	5	Data Port 1
3	Data Port 0 (PoE)	6	Signaling-LED

LED Signaling

| LED	Signal	Meaning
1	green green flash	Link active Receiving
2	yellow	Transmitting
3	green qellow	Power On Readout active

Heat Transmission

⚠ **Caution**

Provide adequate dissipation of heat, to ensure that the temperature does not exceed +60°C (+140°F).

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.
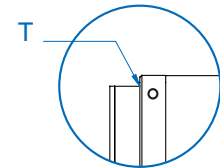
T: Housing temperature measurement point

As there are numerous possibilities for installation, a specific method for proper heat dissipation is not defined, but the following principles are suggested:

- Operate the cameras only in mounted condition with a good heat conductor (e.g. aluminum)
- Mounting in combination with forced convection may provide proper heat dissipation

Data Interfaces

Data / Control 1000 Base-T (Port 0)			Data / Control 1000 Base-T (Port 1)		
1	(gn/wh)	MX1+	1	(gn/wh)	MX1+
2	(gn)	MX1-	2	(gn)	MX1-
3	(og/wh)	MX2+	3	(og/wh)	MX2+
4	(bu)	MX3+	4	(bu)	MX3+
5	(bu/wh)	MX3-	5	(bu/wh)	MX3-
6	(og)	MX2-	6	(og)	MX2-
7	(bn/wh)	MX4+	7	(bn/wh)	MX4+
8	(bn)	MX4-	8	(bn)	MX4-

Notice

Only Port 0 supports Power over Ethernet (38 VDC .. 57 VDC).

For the data transfer, the ports are equal. For Single GigE connect one port and for Dual GigE connect the second Port additionally. The order does not matter.

Power Supply and Process Interface

Power Supply			Digital I/O-Supply M8 / 8 pins		
1	(bn)	Power V_{CC}	1	(wh)	Line 5
3	(bu)	GND	2	(bn)	Line 1
4	(bk)	not used	3	(gn)	Line 0
			4	(ye)	GND
			5	(gr)	U_{ex}
			6	(pk)	Line 3
			7	(bu)	Line 4
			8	(rd)	Line 2

Power Supply	
Power VCC	20 VDC .. 30 VDC