

Line Scan Camera SK4096GFD-4L

CCD

monochrome

Gigabit
ETHERNET

Digital camera with 120 MHz digital output
and very high line frequency



Sensor Characteristics

Sensor type:	CCD, Monochrome
Pixel number:	4096
Pixel size:	10 x 10 μm^2
Active sensor length:	41 mm
Pixel frequency:	120 / 60 MHz
Max. line frequency:	27.777 kHz
Min. integration time:	0.01 ms
Max. integration time:	20 ms
Spectral range:	400 - 1000 nm
Dynamic range:	1:2000 (rms)

Mechanical data

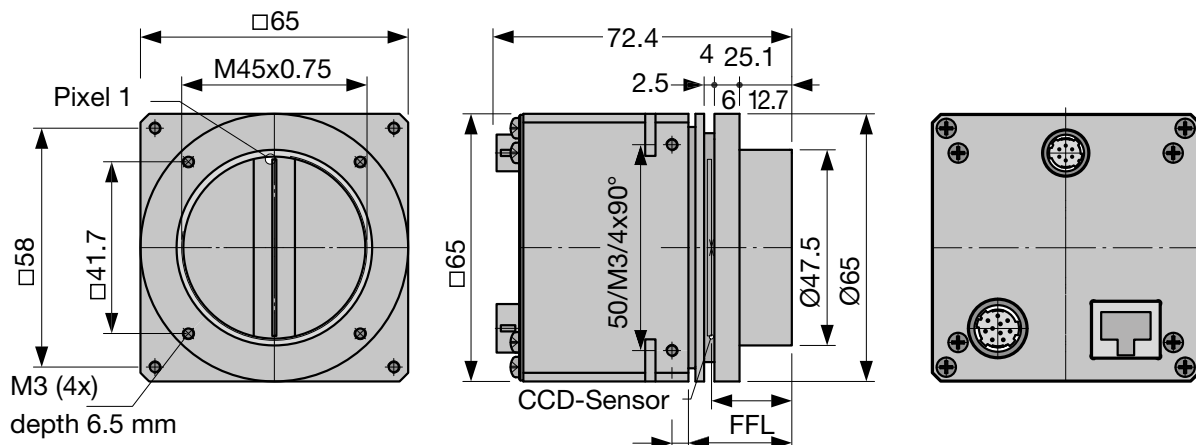
Case type:	BG3
Size:	65 mm x 65 mm x 72.4 mm
Mass:	0.3 kg
Lens mount:	M45x0.75
Flange focal length (FFL):	19.5 mm
Seat for bracket:	$\text{Ø}47.5$ mm

Functioning Features


Blooming protection:	x
Integration control:	x
Shading correction:	x
Look-up table:	x
Region of interest (ROI):	x
Thresholding:	x
Temperature sensor:	x
External synchronization:	x
Operating temperature:	+5 ... +45°C

Connections

Interface:	GigaBit Ethernet
	RJ-45 (8P8C)
Video signals:	monochrome 8/12 Bit digital
Power supply:	24V DC, 7.0 W
	Hirose 10A, 4-pin, male
External synchronization:	TTL
	Hirose 10A, 12-pin, male



Software



Software

SK91GigE-WIN Order Code


SDK from Schäfter + Kirchhoff including the **SKLineScan** operating program, as well as API, C++ class library and examples.

Operating systems:
Windows 7 / 8.1 / 10 - x64 and x86

SK91GigE-LV VI Order Code

VI-Library for LabVIEW®, requires **SK91GigE-WIN**

Accessories




CAT6 Network cable

Shielded CAT6 patch cable, halogen-free, both ends with RJ45 connectors for Gigabit Ethernet

CAT6.x Order Code

└ cable length 3 / 5 / 10 m or length according to choice, max. 100 m




Power cable SK9014.xF

for GigE Vision™ line scan cameras with 24 VDC supply voltage.

Shielded cable with Hirose plug HR10A, female 6-pin (camera side), and open-ended cable.

SK9014.xF Order Code

└ cable length 1.5 / 3 / 5 m




External synchronization cable SK9024...

for line scan cameras with GigE / GigE Vision™ interface.

Shielded cable with Hirose plug HR10A, female 12-pin (camera side), and Phoenix 4-pin connector incl. terminal block.

SK9024.x Order Code

└ cable length 3 / 5 m
Other lengths on request



Adapter cable for sync signals CAB-ADSync-BNC-1

BNC/SMA (3x) to line scan camera synchronization cable SK9016/SK9024/SK9026.

Shielded cable, length 0.25 m

Connectors:
1x Phoenix 4-pin connector
3x SMA plug (Line Sync A, Line Sync B, Frame Sync)
3x adapter SMA socket (outside thread) to BNC-plug

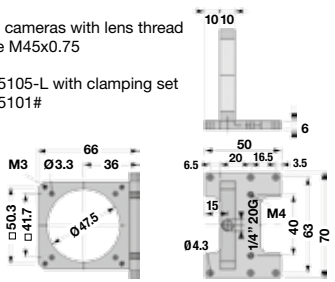
CAB-ADSync-BNC-1 Order Code

M2 Mounting Bracket SK5105-L

For cameras with lens thread size M45x0.75

SK5105-L Order Code

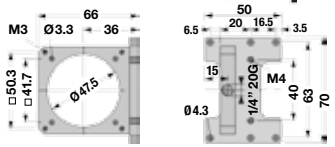
SK5105-L with clamping set SK5101#



MC2 Clamping Set SK5101

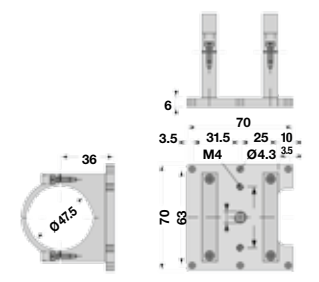
Clamp Order Code **SK5101** (set of 4 pcs.)

Allen screw DIN 912-M3x12



M4 Mounting System SK5105-2L

SK5105-2L Order Code



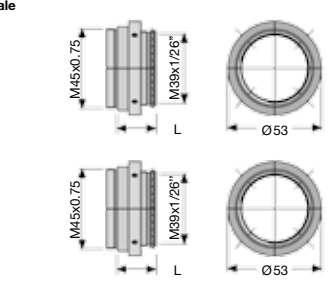
For camera configurations with tube length > 55 mm using extension rings **ZR-L**

FA3 Focus adapter L-Mount (M39x1/26" Leica)

any rotation angle adjustable (V-groove)
attachment thread M45x0.75, male

FA22R-45 Order Code
length L: 22 ... 32 mm

FA22RL-45 Order Code
length L: 29 ... 38 mm




A3 Lens Adapter F-Mount

for line scan cameras with case type **Axx** or **BGx**.

AOC-F-... Order Code

Attachment thread:
45 = M45x0.75
40 = M40x0.75
32 = M32x0.75
C = C-Mount 1"-32-TP



ZR-L Extension rings M45x0.75

attachment threads M45x0.75 male/female

ZR-L.25 Order Code

└ 15 = Length 15 mm
25 = Length 25 mm
60 = Length 60 mm
87 = Length 87 mm

