

## Line Scan Camera SK4096CTDI-XL

CCD



96-stages Time Delay and Integration Digital camera with very high sensitivity and high line frequency, gain and offset adjustable by PC, anti blooming



### ■ Sensor Characteristics

Sensor type:	CCD, TDI
Pixel number:	96x 4096
Pixel size:	13 x 13 $\mu\text{m}^2$
Active sensor length:	53.2 mm
Pixel frequency:	100 / 50 MHz
Max. line frequency:	22.3 kHz
Min. integration time:	0.01 ms
Max. integration time:	20 ms
Spectral range:	400 - 1000 nm
Dynamic range:	1:2500 (rms)

### ■ Mechanical data

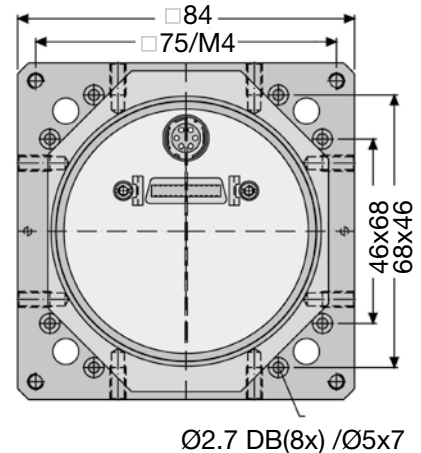
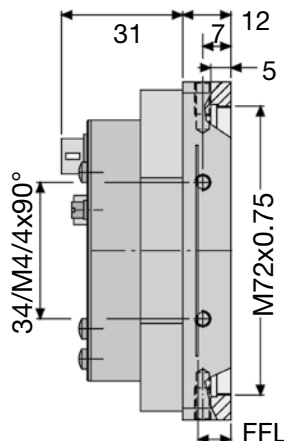
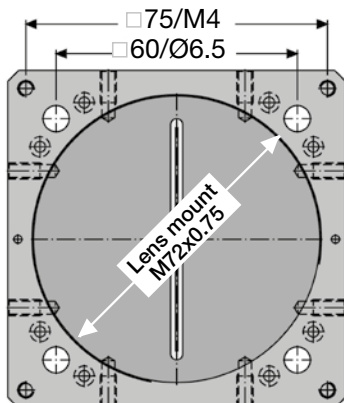
Case type:	CC5
Size:	84 mm x 84 mm x 42.5 mm
Mass:	0.3 kg
Lens mount:	M72x0.75
Flange focal length (FFL):	8.2 mm

### ■ Functioning Features

Anti blooming:	x
Integration control:	-
Shading correction:	x (or by means of grabber)
Look-up table:	x (or by means of grabber)
Region of interest (ROI):	x (or by means of grabber)
Thresholding:	-
Temperature sensor:	x
External synchronization:	by means of grabber
Operating temperature:	+5 ... +45°C

### ■ Connections

Interface:	Camera Link
	MDR-26, 26-pin, female
Video signals:	monochrome 2*8/12 Bit digital
Power supply:	+5/+15V DC, 5.3 W
	Hirose 10A, 6-pin, male
External synchronization:	by means of grabber




## Features

- Extended Trigger Functions**  
 Direction of movement or slippage can be detected by using two external synchronization signals.
- Shading Correction Memory (SCM) and Look-Up Table (LUT) options**  
 The calibration data in the SCM automatically adjusts the line signal data directly in the camera after each exposure.  
 The LUT is a separate memory block that can also be used for postprocessing the line signal data, such as applying a Gamma function.

- Window-Function**  
 The line signal data to be transferred can be restricted to a defined section of the line sensor.
- The **Gains or Offsets** for all AD-converter channels can be **adjusted simultaneously**, simplifying handling.
- Integrated Temperature Sensor**

## Accessories




**Power supply unit PS051515**  
 Input: 100-240 VAC, 0.8 A, 50/60 Hz  
 IEC60320 C14 coupler (for IEC C13 power cord)  
 Output: +5VDC, 2.5 A / +15VDC, 0.5 A / -15VDC, 0.3 A  
 Cable length: 1 m, with Lumberg connector KV60, female 6-pin

**PS051515** **Order Code**


**Power cord IEC60320 C13, 1.5 m, 10 A, 250 VAC**  
**PC150DE** **Order Code**  
 DE = Europe / US = USA, Canada, Japan / UK = United Kingdom

DE US UK



**Control cable SK9018...**  
 26-pin shielded cable, both ends with mini-ribbon connector (male 26-pin)

**SK9018.x-MM** **Order Code**  
 MM = connector both ends male  
 cable length 3 / 5 m or length according to choice, max. 10 m



**Power cable SK9015.x**  
 for GigE Vision™, CameraLink and externally supplied USB3 line scan cameras.  
 Shielded cable with Hirose plug HR10A, female 6-pin (camera side), and LumbergSV60, male 6-pin connector (power supply unit side).

**SK9015.x** **Order Code**  
 cable length 0.2 / 1.5 m

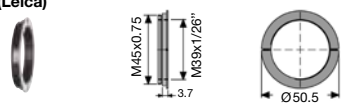


**Focus Adapter FA26-Sx**  
 High-precision adapter with linear tracking rods for precise travel of the focussing encasement and for locking focus position. Focussing range 29 mm, 1 turn of the focussing ring corresponds to 10 mm. Screws for focus locking.


**FA26-Sx** **Order Code**  
 45 = thread M45x0.75  
 length 40.5 ... 69.5 mm  
 55 = thread M55x0.75  
 length 51 ... 80 mm

**Lens Adapters and Extension Rings M45x0.75**

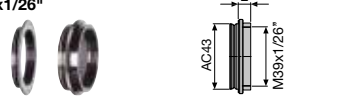
**Lens Adapter M45x0.75 to M39x1/26 (Leica)**  
**M39-45** **Order Code**  
 length L=3.7 mm



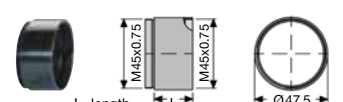
**Adapter M45x0.75 46 mm to AM43**  
**AM43-M45-S** L=20 mm  
**AM43-M45** L=35 mm  
 The AM43-M45 accepts the V-groove lens adapter M39x26G-AC43.



**Lens Adapter V-Groove AC43 to M39x1/26"**  
**M39x26G-AC43-S** L=1.5 mm  
**M39x26-AC43** L=8.2 mm



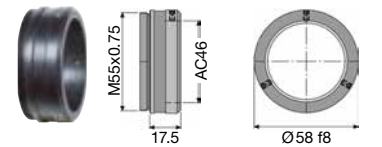
**Extension Ring M45x0.75**  
**ZR-L...** **Order Code**  
 15 = length 15 mm  
 25 = length 25 mm  
 60 = length 60 mm  
 87 = length 87 mm



**Lens Adapters and Extension Rings M55x0.75**

**Lens adapter 46 mm V-groove - M55x0.75**  
 for macro lens inspec.x L5.6/105

**AC46-55** **Order Code**  
 The Adapter AC46-55 adds 17.5 mm to the optical tube length. It accepts the AC46 V-groove of the Inspec.x macro lenses.



**Extension Ring M55x0.75**  
**ZR55...** **Order Code**  
 15 = length 15 mm  
 25 = length 25 mm  
 60 = length 60 mm

