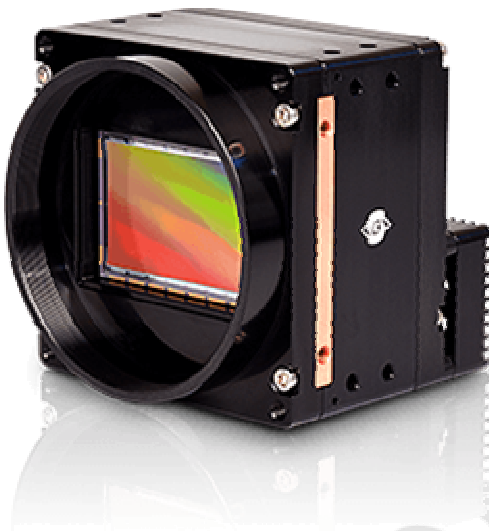


# shr47051MCL

## SVCam SHR Camera Link



### Technical Highlights

- > 47 Megapixels at optimized frame rates
- > Progressive scan CCD
- > 512 MB internal memory
- > M72 Interface (FFD 19,55 mm)
- > Tap balancing – auto/manual
- > Area of Interest / Partial Scan
- > Exposure: trigger manual/auto/external
- > Signal safe: Schmitt-trigger, debouncer and prescaler
- > Versatile I/O concept: 24 V signal levels and RS232
- > 1 x galvanically isolated opto input
- > LED control 4 x
- > Sequencer – up to 16 individual Intervals (exposure and LED)
- > 4 pulseloop modules generate signals for exposure, LED or triggering
- > Power supply: 10 – 25 VDC
- > GenICam compliant

#### Camera Link specific:

- > Camera Link Full (80-bit) host interface
- > pixel clock selection
- > 4 x 4 binning
- > Up to 3.5 frames/second

### SVCam – SHR – Serie Broader field - Finer details

The SHR brings out even the finest details, offering significant benefits for inspection of large surfaces. Ideal for solving tasks within wafer, solar panel and display inspection. The SHR 47 simply provides megapixels with superb image quality.

### 47 megapixel precision - Made in Germany

The ON Semiconductor KAI-47051 CCD sensor boasts a 5.5  $\mu\text{m}$  pixel pitch, 56.7 mm image diagonal and 7 frames/second at maximum data rate.

The SHR features an M72 lens mount. The short flange back distance of 19.55 mm allows individual adaptation of high performance lens systems for virtually any task. Our guarantee for the best results with this sensor.

### SHR – Camera Link

Enhance existing Camera Link architectures seamlessly, the SHR significantly boost bandwidth capability with the Camera Link 80-bit Full upgrade.

Employing as many as 16 taps, the sensor delivers its 47 megapixels in the finest CCD quality. The unique tap balancing, devised by SVS-VISTEK, is renowned for being among the best - worldwide. It ensures effortless integration of the camera in your application.

### Versatile I/O-Concept

- > Built-in LED-Controllers
  - 4x input (0-24 V)
  - 4x output (open drain)
  - 1x serial RS-232 and RS-422
- > Up to 4 direct drive and control of LED-lighting
- > Programmable Sequencer for Shutter and LED-light





SVCam SHR Series

shr47051MCL

Resolution	8856 x 5280 px
Frame rate	7 fps
Chroma	mono
Interface	Camera Link 80

Sensor

Sensor	KAI-47051-A
Manufacturer	ON Semiconductor
Sensor type	Area CCD
Sensor architecture	interline transfer
Readout type	progressive scan
Sensor size (h x v)	48.71 x 29.04 mm
Optical diagonal	56.71 mm
Pixel size (h x v)	5.5 x 5.5 µm

Camera

Exposure modes	MANUAL;AUTO;EXTERNAL
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	0 µs
Exposure time (max)	1 sec (external ∞)
Pixel format / max	mono8, mono12
Gain modes / max	auto / 18 dB
SNR	60 dB / 10 bit
Pixel clock	40 MHz
Internal memory	256 MB

Feature Set

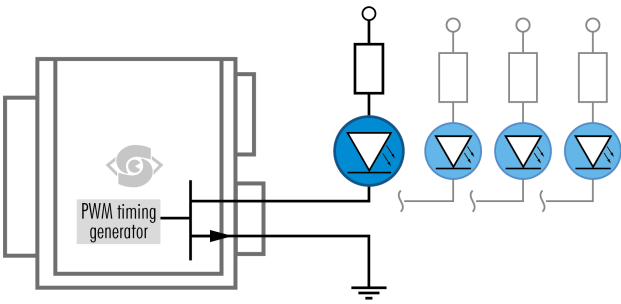
Offset	yes
Binning	yes
Image flip	yes
Defect pixel correction	yes

Housing

Lens mount	M72x1
Dimensions (w x h x d)	80 x 80 x 45 mm
Weight	400 g
Protection class	IP20

I/O-Interfaces

Input up to 24V	2 x
Output open drain	4 x
I/O RS-232	1 x
Power supply	10 to 25 V (DC)
Power consumption	12 W



Pinout

	1	VIN -	(GND)	7	OUT 1	(open drain)
	2	VIN +	(10 V to 25 V DC)	8	OUT 2	(open drain)
	3	IN 4	(RXD RS232)	9	IN 3+	opto
	4	OUT 4	(TXD RS232)	10	IN 0-	opto
	5	IN 1	(0 - 24V)	11	OUT 3	(open drain)
	6	IN 2	(0 - 24V)	12	OUT 0	(open drain)