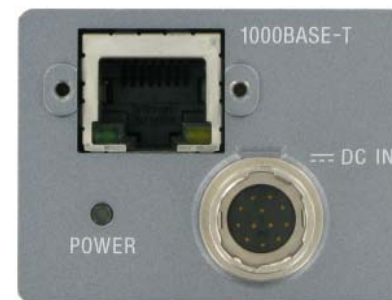


## Sony GigE-Vision-Kameras XCG

**GIG**<sup>TM</sup>  
VISION

**GEN***<i>***CAM**



**... hohe Bildqualität und verlustfreie Bildübertragung über Distanzen bis 100m!**

## Features

### Kamera-Features

- ✓ Video Output: 8,10,12 bit
- ✓ Framerate: bis zu 90 fps (Full Scan)
- ✓ Binning (1x2), Partial Scan
- ✓ Binarization, Gammakorrektur
- ✓ Auto-Gain
- ✓ Speicher für 16 für 'Custom Presets'

### Standards

- ✓ GigE-Vision-Standard
- ✓ Gen<I>Cam-Standard



### Datenübertragung

- ✓ hohes Übertragungsvolumen: 1Gbit/s (zukünftig 10..100Gbit/s)
- ✓ Unkomprimierte und verlustfreie Datenübertragung (Packet-Resend)
- ✓ Host-CPU-Entlastung (Jumbo-Paket)
- ✓ Kabellängen bis 100m (ohne Switches)
- ✓ Kostengünstige Verkabelung (CAT5e)
- ✓ Kein Framegrabber notwendig
- ✓ Komplexe Netzwerktopologien

### Bauform

- ✓ Hohe Schock- (70G) und Vibrationsresistenz (10G bei 20 - 200Hz)
- ✓ Hirose-Stecker: Stromversorgung, I/O (1 IN, 1 Out), Strobe
- ✓ Netzwerk-Anschluss mit verschraubbaren Steckern

## Modellübersicht



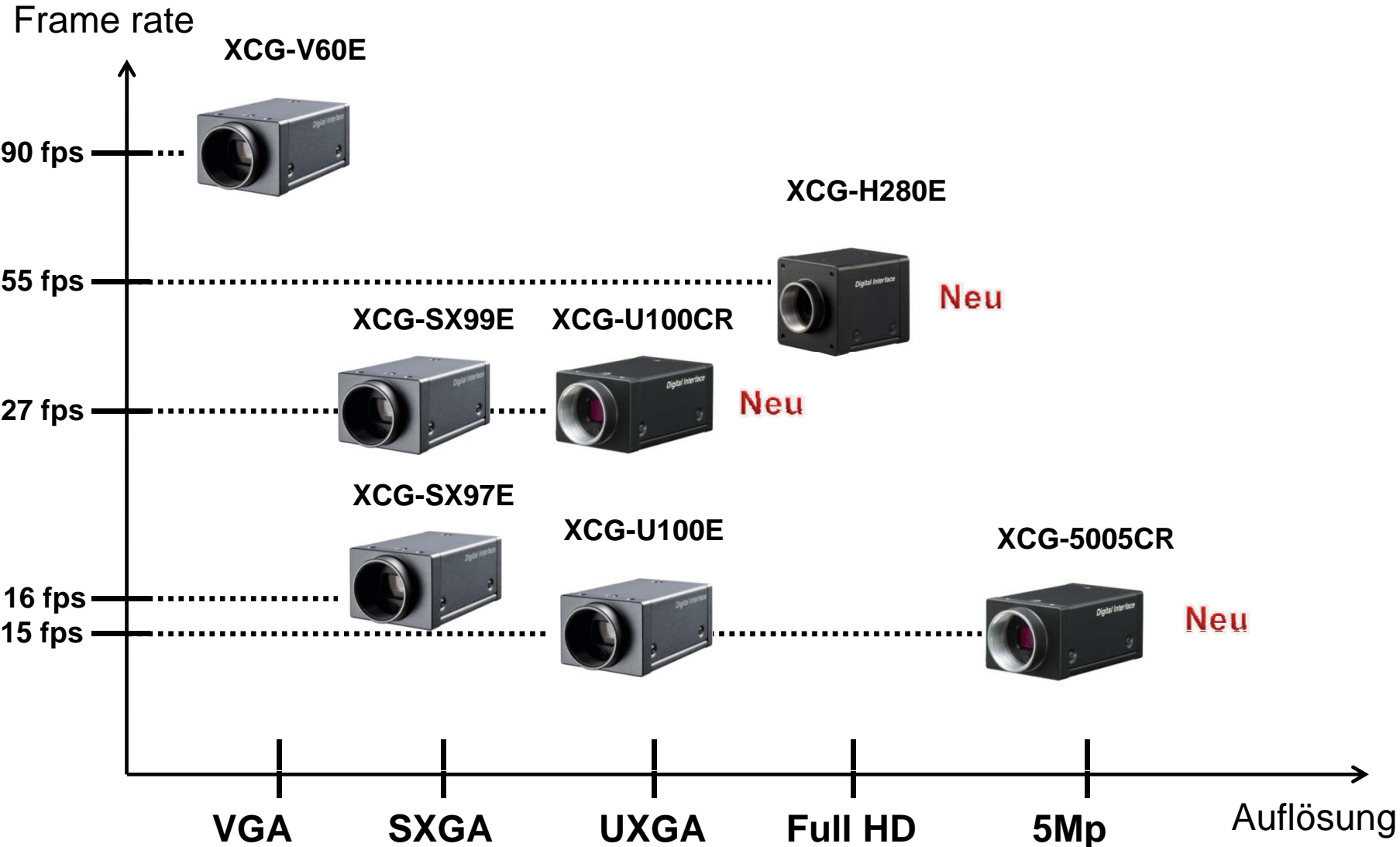
Modell	Sensor	Auflösung	Pixelgröße	fps	Dim. (BxHxL)
<b>High Speed</b> XCG-V60E	1/3" HAD PS IT CCD	7.4 (µm)	640x480 (VGA)	90 fps	44x33x67,5 mm
<b>High Sensitivity &lt; 0,2 lx</b> XCG-SX97E	2/3" HAD PS IT CCD	6.45 (µm)	1360x1024 (SXGA)	16 fps	44x33x67,5 mm
XCG-SX99E	2/3" HAD PS IT CCD	6.45 (µm)	1360x1024 (SXGA)	27 fps	44x33x67,5 mm
<b>High Resolution</b> XCG-U100E / CR	1/1.8" HAD PS IT CCD	4.4 (µm)	1600x1200 (UXGA)	15 fps / 27 fps	44x33x67,5 mm
XCG-5000E / CR	2/3" HAD PS IT CCD	3.45 (µm)	2448x2050 (5MP)	15 fps	44x33x67,5 mm
<b>Full HD!</b> XCG-H280E	2/3" HAD II CCD	4,54 (µm)	1920x1080 1920x1440 (max.)	55 fps @ 1920 x 1080	50x50x57.5

PS = Progressive Scan; IT= Interline-Transfer; HAD = Hole Accumulation Diode (High Sensitivity and low dark current)

### Neue Modelle

	XCG-U100CR	XCG-5005CR	XCG-H280E
	High resolution, colour	Ultra-high resolution, colour	Full HD, B&W
Image Device	1/1,8 type progressive scan IT CCD	2/3 type progressive scan IT CCD	2/3 type progressive scan IT CCD
Cell Size (H) x (V)	4,4 x 4,4 $\mu\text{m}$	3,45 x 3,45 $\mu\text{m}$	4,54 x 4,54 $\mu\text{m}$
Standard Picture Size (H) x (V)	1600 x 1200	2448 x 2048	"1920 x 1080 (default)
Resolution depth	8/10/12 bits /pixel (Raw data or B&W)		
lens mount	C mount		
standard frame rate	27 fps	15 fps	55 : fps @ 1920 x 1080
Digital Interface	1000 BASE-T (GigE Vision compatible)		
Gain control	Manual (0 to +18dB) / Auto		
Shutter speed	Manual (2 to 1/100,000s)		
Readout mode	Normal / Partial Scan		Normal / Binning / Partial Scan
External trigger modes	Hardware/Software, Pulse-edge, Pulse-width, Special (Bulk/Sequential)		
synchronisation, I/Os	2 Inputs, 2 outputs (Trigger delay, Strobe control support)		4 Inputs, 2 outputs (Trigger delay, Strobe control support)
Memory Channel	16 channels		
Special features	One Push White Balance / Manual		<ul style="list-style-type: none"> <li>• Chunk data (trigger and frame counters, I/Os status, camera settings)</li> <li>• Internal Temperature Sensor</li> <li>• Memory shot</li> </ul>
Operating temperature	-10° C~ +50° C		
Power requirements	+ 12 Vdc (+10.5 to +15 Vdc)		
Dimensions : mm (W x H x D)	44 x 33 x 67.5		50 x 50 x 57.5

### Frame Rate vs Auflösung



## Sony High Quality CCD's

Speed

**ICX-424 (HAD)**



**XCG-V60E**  
S/W  
1/3" VGA  
90 fps

**ICX-285 (EXview HAD)**



**XCG-SX99E**  
S/W  
2/3" SXGA  
27 fps


**XCG-SX97E**  
S/W  
2/3" SXGA  
16 fps

**ICX-274 (Super HAD)**




**XCG-U100E/CR**  
S/W / Farbe  
1/1.8 UXGA  
15 fps / 27 fps

**ICX-674 (EXview HAD II)**



**XCG-H280E**  
S/W  
2/3" Full HD  
55 fps

**ICX-625 (EXview HAD)**

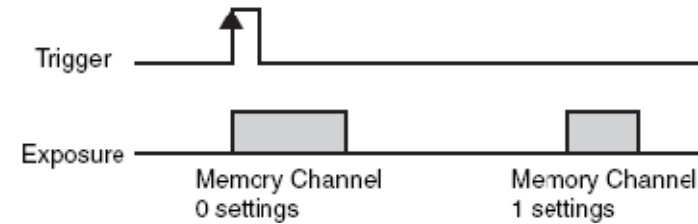


**XCG-5005E/CR**  
S/W / Farbe  
2/3" QXGA  
15 fps

Auflösung

## Triggermodi

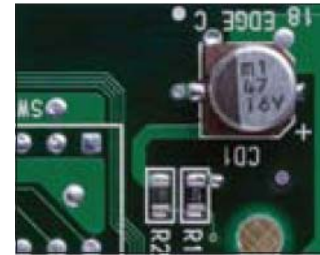
**Bulk Trigger Mode:** Mit einem Trigger-Signal können mehrere Bilder mit verschiedenen Presets (bis zu 16) aufgenommen werden.



Slow Shutter Speed



High Shutter Speed



Composite Image with Wide Dynamic Range

**Sequential Trigger Mode:** Periodisch wird bei jedem Trigger-Signal ein Bild mit einem der verschiedenen Presets aufgenommen. (Bis zu 16 Einstellungen.)

