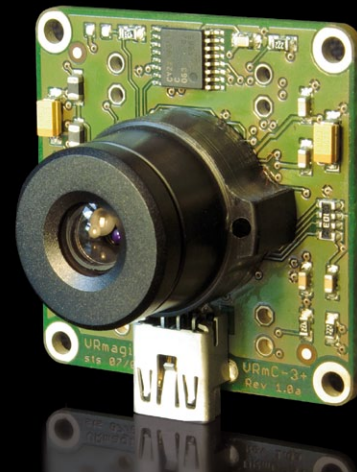


streaming components!



Streaming Components

VRmagic offers various CMOS cameras that transfer image data to a host system via the Highspeed USB 2.0 interface. This permits no-fuss integration in existing applications. Handy frame grabbers also make it easy to connect analog cameras to a PC or laptop.

Streaming Components are available with different CMOS sensors, in monochrome and color, with rolling or global shutter and resolutions from VGA (640x480) to three megapixels (2048x1536).

Camera Features

- Standard Mini USB-B connector
- USB powered
- Freely programmable timings
- Unlimited access to uncompressed sensor data
- Optimized for parallel operation of multiple cameras
- Soft-trigger
- Timestamps
- Framecounter
- Storage of user configurations in the device
- Multiple standard formats plus one free definable ROI (Region of Interest)
- No frame grabbing hardware necessary



Framegrabber AVC

	VRmAVC-1	VRmC-3+	VRmC-4	VRmC-6	VRmC-8+	VRmC-8	VRmC-9+	VRmC-9	VRmC-12
CMOS Sensor		1/3"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/3"
Color	x	x	x	x	x	x			x
Monochrom	x	x	x	x			x	x	x
Resolution	PAL/NTSC	752x480	800x600	640x480	2048x1536	2048x1536	1280x1024	1280x1024	752x480
Pixelsize		6x6 µm	8x8 µm	9.9x9.9 µm	3.2x3.2 µm	3.2x3.2 µm	5.2x5.2 µm	5.2x5.2 µm	6x6 µm
FPS		69	30	132	13	13	30	30	69
Pixelclock		5-26.6 MHz	5-15 MHz	5-42 MHz	5-48 MHz	5-48 MHz	5-48 MHz	5-48 MHz	5-26.6 MHz
Shutter		global	rolling	global	rolling	rolling	rolling	rolling	global
Board size (mm)	42x38x33	32x32x7	42x38x18	42x38x18	32x32x7	42x38x18	32x32x7	42x38x18	42x38x18
Housing size (mm)	55x45x33	36x36x27	46x46x40	46x46x40	36x36x27	46x46x40	36x36x27	46x46x40	46x46x40
Software-Trigger		x	x	x	x	x	x	x	x
Hardware-Trigger			x	x		x		x	x
Hardware-Strobe			x	x		x		x	x
Illumination (Cob)		x	x	x		x		x	x

Model VRmC-3+ and VRmC-4 transfer 8 bit sensor data via USB, all other Streaming Components alternatively 8 bit or 10 bit.