

# USB components

## VRmC-9+/BW-PRO

Compact USB 2.0 Camera in Aluminium Housing

- Extra small form factor
- Highspeed USB interface
- Cost effective for high volumes
- SDK and API included, same API on all cameras
- Software trigger

### Sensor Characteristics

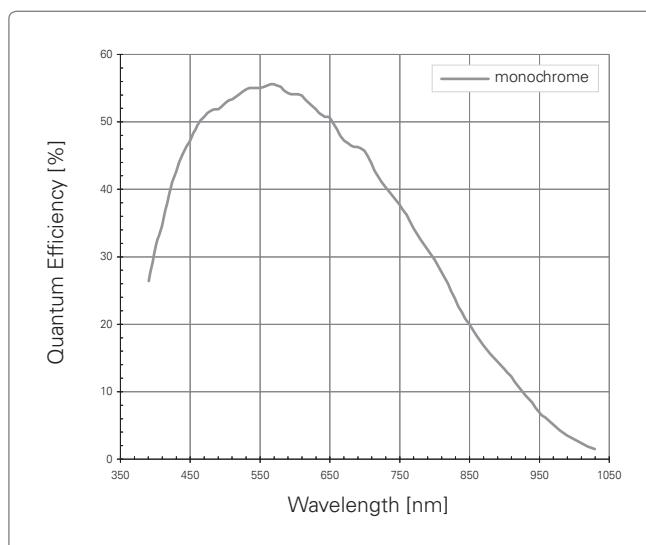
Type	Aptina MT9M001
Technology	CMOS, rolling shutter
Mono/Color	monochrome
Sensor Size	1/2"
Resolution	1288 x 1032
Pixel Size	5.2 $\mu\text{m}$ x 5.2 $\mu\text{m}$
Max. Frame Rate *	30 Hz
Min. Exposure Time	38 $\mu\text{s}$
Bit Depth	8/10 bit
Pixel Clock	5 ... 48 MHz
Responsivity	> 2.1 V/lux·sec
Dynamic Range	68 dB linear

### Camera Features

- User programmable windowing and panning
- Freely definable region of interest (ROI)
- Adjustable anti-blooming circuit
- Parallel operation of multiple cameras possible



Photo similar to original product



\* Maximum value at full ROI with minimum exposure time. Actual value depends on pixel clock, sensor settings, and image format.

## Physical Characteristics

### Housing

Dimensions	36 x 36 x 27 mm
Material	anodized aluminium
Lens Mount	C-Mount (lens not included)
Filter glass	included

### Ambient Conditions

Operating Temperature	0 ... +40 °C
Storage Temperature	-30 ... +80 °C

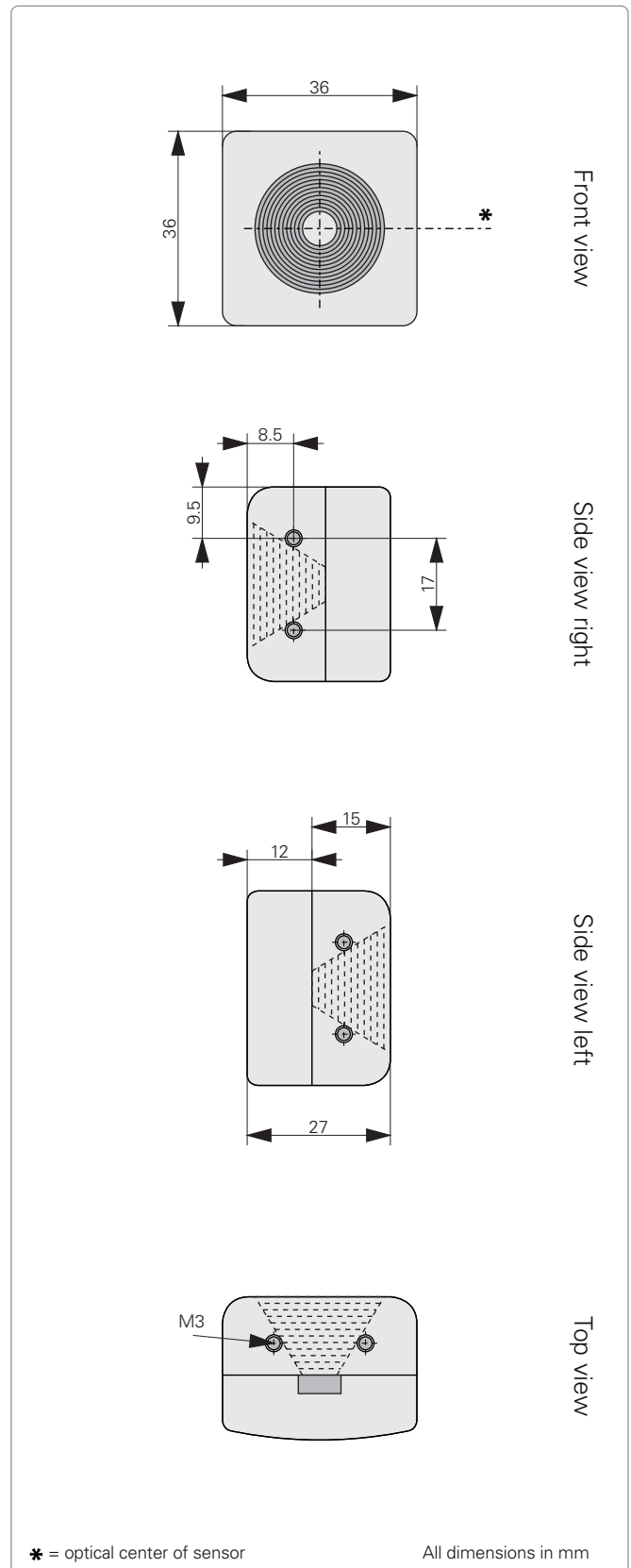
## Interfaces

USB 2.0 port (USB Mini-B); power supply via USB

## Options

### Optics

- Filters: window glass, IR-pass/cut filter, without filter.



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