

Data sheet | VCS2000 series industrial camera

Industrial camera for machine vision



NOTE! The technical data is subject to tolerances and may vary slightly in individual cases.

Tab. 1: General technical data

General technical data	Value
Power supply	EtherCAT mode: EtherCAT P; GigE Vision mode: 24 V DC (-15%/+20%)
Synchronization	EtherCAT mode: DC timestamp and trigger bit; GigE Vision Mode: digital input
Image output	GigE Vision 2.2 supported via Ethernet
Transmission rate	1 Gbit/s, 2.5 Gbit/s
Ethernet	1000/2500BASE-T
Connection technology	M8 socket, 4-pin, P-coded; M12 socket, 8-pin, X-coded
Protection rating	IP65/67, with lens protection tube
Operating temperature range	0...+60°C
Approvals/markings	CE, UKCA, UL (in preparation)
Shutter type	Global Shutter
Sensor type	CMOS area sensor
Lens mount	C mount
Dimensions (W x H x D)	72 mm x 72 mm x 38.4 mm
Weight	370 g (without lens and tube)
Material	anodized aluminum

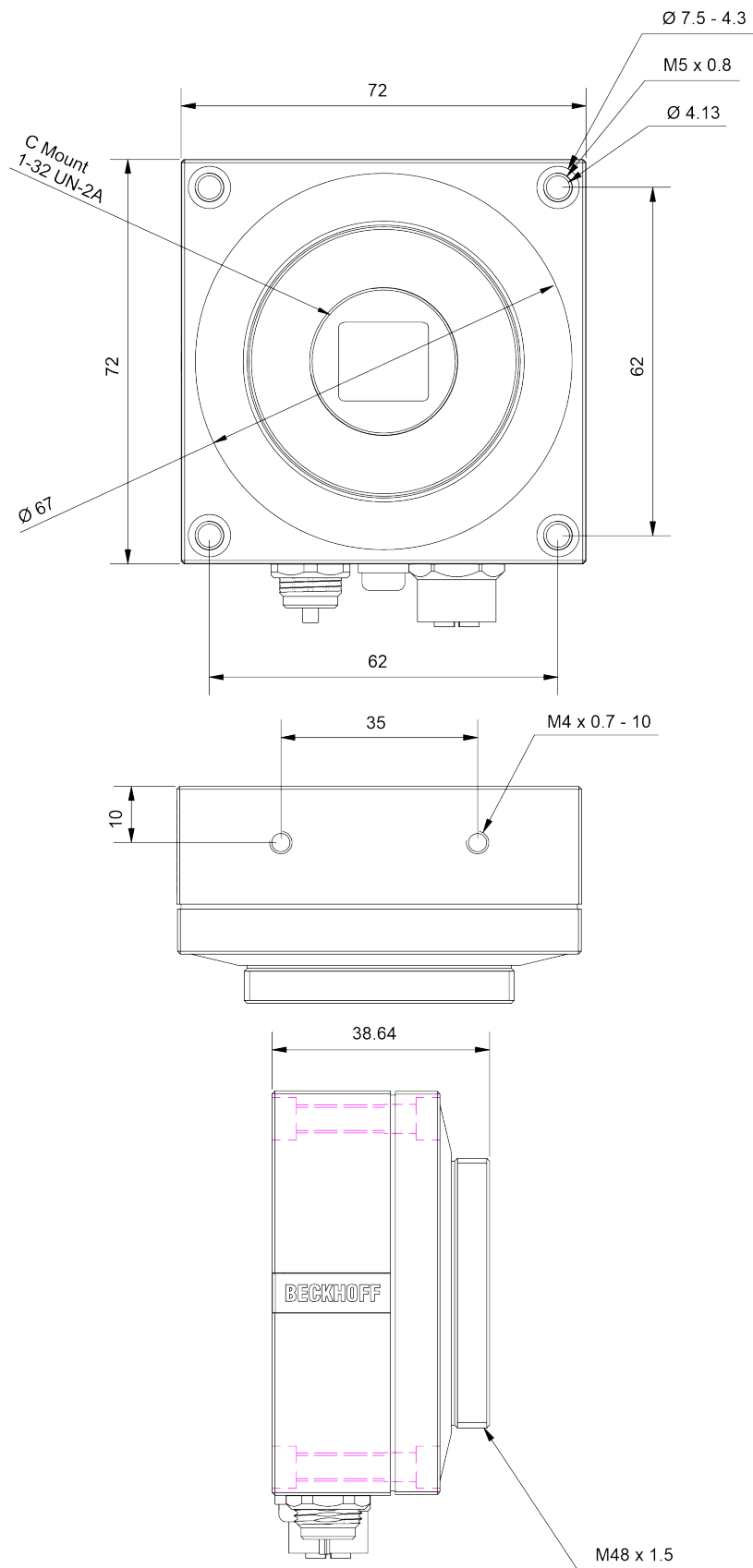


Fig. 1: Dimensions of the camera (Measurements in mm)

Tab. 2: Product-specific technical data, spectral sensitivity monochrome

Technical data	VCS2000-0200	VCS2000-0300	VCS2000-0500	VCS2020-0800	VCS2020-1200
Number of pixels	2.3 MP	3.1 MP	5.0 MP	8.1 MP	12.4 MP
Sensor format	1/2.3" (7.8 mm)	1/1.8" (8.8 mm)	2/3" (11 mm)	2/3" (11 mm)	1/1.1" (14 mm)
Pixel size	3.45 µm	3.45 µm	3.45 µm	2.74 µm	2.74 µm
Pixel format	Mono8, Mono10, Mono12, Mono12 packed				
Max. frame rate	129 fps	55 fps	35 fps	35 fps	24 fps
Resolution	1920 x 1200	2048 x 1536	2464 x 2048	2856 x 2848	4128 x 3008
Image sensor	Sony IMX392LLR	Sony IMX265LLR	Sony IMX264LLR	Sony IMX566AAMJ	Sony IMX566AAMJ
Max. power consumption	9 W	9 W	9 W	9 W	9 W
Exposure time	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s

Tab. 3: Product-specific technical data, spectral sensitivity color

Technical data	VCS2001-0200	VCS2001-0300	VCS2001-0500	VCS2021-0800	VCS2021-1200
Number of pixels	2.3 MP	3.1 MP	5.0 MP	8.1 MP	12.4 MP
Sensor format	1/2.3" (7.8 mm)	1/1.8" (8.8 mm)	2/3" (11 mm)	2/3" (11 mm)	1/1.1" (14 mm)
Pixel size	3.45 µm	3.45 µm	3.45 µm	2.74 µm	2.74 µm
Pixel format	BayerRG8, BayerRG10, BayerRG12, BayerRG12 packed				
Max. frame rate	129 fps	55 fps	35 fps	35 fps	24 fps
Resolution	1920 x 1200	2048 x 1536	2464 x 2048	2856 x 2848	4128 x 3008
Image sensor	Sony IMX392LQR	Sony IMX265LQR	Sony IMX264LQR	Sony IMX566AAQJ	Sony IMX565AAQJ
Max. power consumption	9 W	9 W	9 W	9 W	9 W
Exposure time	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s

Tab. 4: Product-specific technical data, spectral sensitivity monochrome

Technical data	VCS2030-0500	VCS2030-1600	VCS2030-2000	VCS2030-2400	VCS2002-0500*
Number of pixels	5.1 MP	16.2 MP	20.4 MP	24.6 MP	5.0 MP
Sensor format	1/1.8" (8.8 mm)	1.1" (16.8 mm)	1.1" (17.5 mm)	1.2" (19.3 mm)	2/3" (11 mm)
Pixel size	2.74 µm	2.74 µm	2.74 µm	2.74 µm	3.45 µm
Pixel format	Mono8, Mono10, Mono12, Mono12 packed				
Max. frame rate	58 fps	18 fps	14 fps	12 fps	35 fps
Resolution	2472 x 2064	5328 x 3040	4512 x 4512	5328 x 4608	2464 x 2048
Image sensor	Sony IMX547AAMJ	Sony IMX542AAMJ	Sony IMX541AAMJ	Sony IMX547AAMJ	Sony IMX264MZR
Max. power consumption	9 W	9 W	9 W	10 W	9 W
Exposure time	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s

*Polarization/monochrome

Tab. 5: Product-specific technical data, spectral sensitivity color

Technical data	VCS2031-0500	VCS2031-1600	VCS2031-2000	VCS2031-2400	VCS2003-0500*
Number of pixels	5.1 MP	16.2 MP	20.4 MP	24.6 MP	5.0 MP
Sensor format	1/1.8" (8.8 mm)	1.1" (16.8 mm)	1.1" (17.5 mm)	1.2" (19.3 mm)	2/3" (11 mm)
Pixel size	2.74 µm	2.74 µm	2.74 µm	2.74 µm	3.45 µm
Pixel format	BayerRG8, BayerRG10, BayerRG12, BayerRG12 packed				Mono8, Mono10, Mono12, Mono12 packed
Max. frame rate	58 fps	18 fps	14 fps	12 fps	35 fps
Resolution	2472 x 2064	5328 x 3040	4512 x 4512	5328 x 4608	2464 x 2048
Image sensor	Sony IMX547AAQJ	Sony IMX542AAQJ	Sony IMX541AAQJ	Sony IMX540AAQJ	Sony IMX264MYR
Max. power consumption	9 W	9 W	9 W	10 W	9 W
Exposure time	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s	15 µs – 12 s

*Polarization/color

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