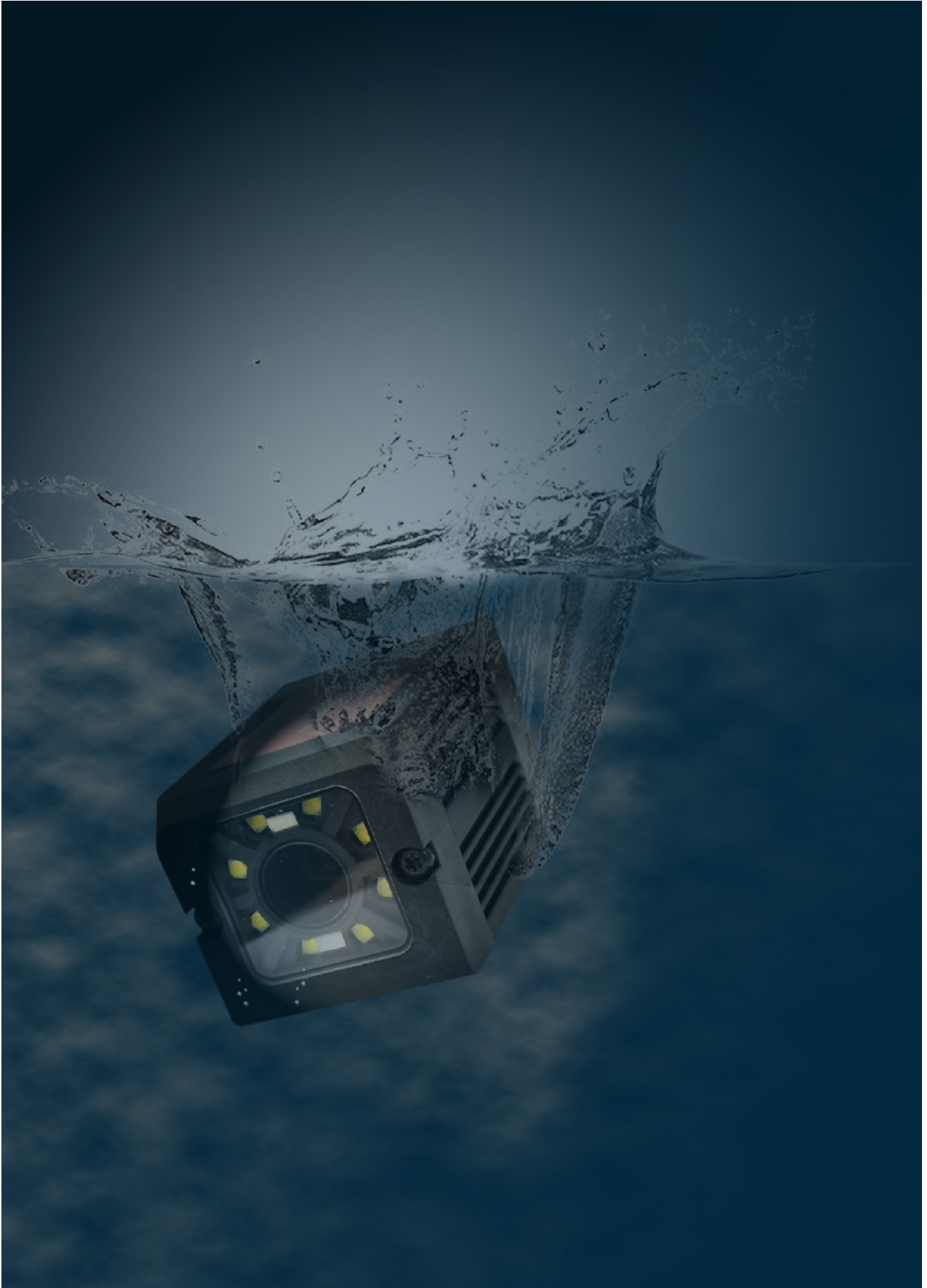




EyeCheck
Smart Cameras



EyeCheck 9xx & 1xxx series

Technical data

Memory:	
DDR RAM	128 MB
FLASH	128 MB
Interfaces:	Ethernet (LAN)
	RS422, RS232 (not EC900, EC910, EC1000, EC1010)
	EtherNet / IP
	PROFINET
Digital I/Os	2 In- / 4 Outputs, 4 wählbare In- / Outputs
Protection Class	IP 65 bis IP 67
Current consumption (without light & IO)	≤ 120 mA
Current consumption (ohne IO)	≤ 200 mA
Power supply	18 ... 26.4 VDC
Ambient temperature:	Operating: 0 ... +50 °C (at 80% air humidity)
	Storage: - 20 ... + 60 °C (at 80% air humidity)
Weight	approx. 160 g
Dimensions without lens (W x H x L)	65 x 45 x 45 mm (without connector)

EyeCheck 9xx

Model	Resolution	Sensor	Focal length	Integrated illumination	Processor
EC900	640 x 480	1/3" CMOS	6, 12, 25 mm	LED: white, red or infrared	600 MHz
EC901	640 x 480	1/3" CMOS	C-Mount	none	600 MHz
EC910	736 x 480	1/3" CMOS	6, 12, 25 mm	LED: white, red or infrared	600 MHz
EC911	736 x 480	1/3" CMOS	C-Mount	none	600 MHz

EyeCheck 1xxx

Model	Resolution	Sensor	Focal length	Integrated illumination	Processor
EC1000	640 x 480	1/3" CMOS	6, 12, 25 mm	LED: white, red or infrared	1 GHz
EC1001	640 x 480	1/3" CMOS	C-Mount	none	1 GHz
EC1010	736 x 480	1/3" CMOS	6, 12, 25 mm	LED: white, red or infrared	1 GHz
EC1011	736 x 480	1/3" CMOS	C-Mount	none	1 GHz
EC1100	768 x 582	1/1,8" CMOS	12 mm	LED: white, red or infrared	1 GHz
EC1101	768 x 582	1/1,8" CMOS	C-Mount	none	1 GHz
EC1200	1024 x 768	1/1,8" CMOS	12 mm	LED: white, red or infrared	1 GHz
EC1201	1024 x 768	1/1,8" CMOS	C-Mount	none	1 GHz
EC1300	1280 x 1024	1/1,8" CMOS	12 mm	LED: white, red or infrared	1 GHz
EC1301	1280 x 1024	1/1,8" CMOS	C-Mount	none	1 GHz



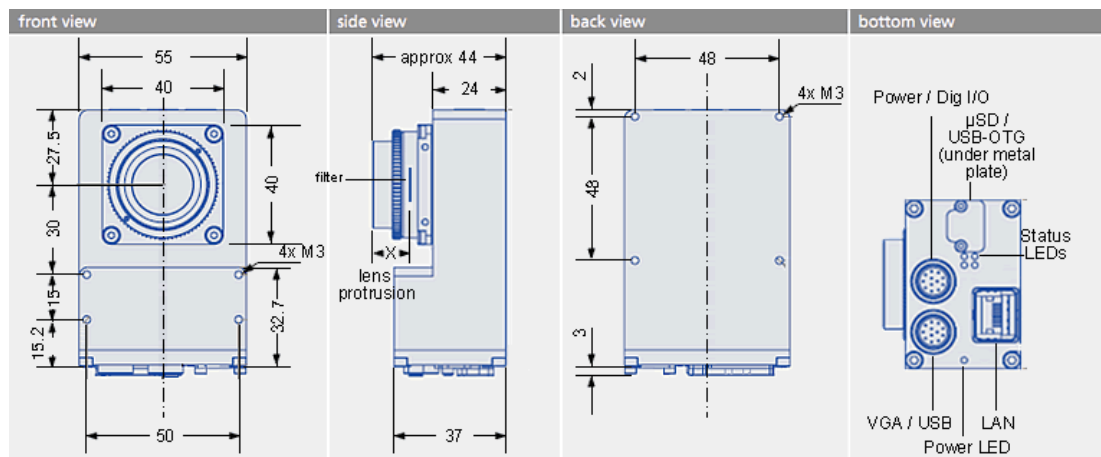
EyeCheck 2xxx & 3xxx series

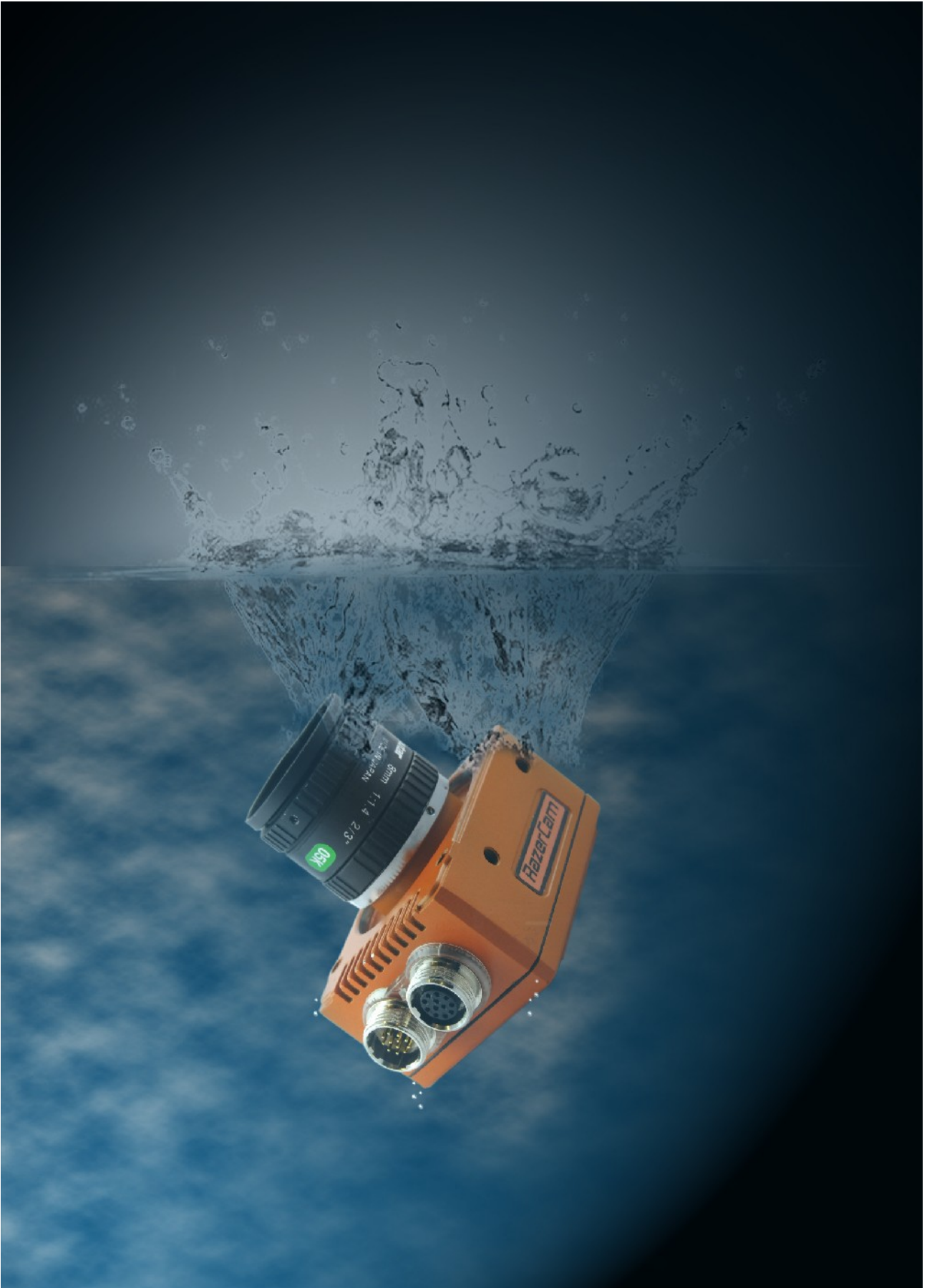
Technical Data

CPU	ARM Cortex-A8, up to 1GHz (OMAP 37 series)
DSP	up to 800 MHz C64x
Memory:	
DDR RAM	512 MB
FLASH	Intern microSD, external accessible microSD
Connection:	100 MBit
	Ethernet LAN
2x Hirose 12-Pin:	#1 (male connector): RS-232 power supply
	#2 (female connector): VGA Display. USB 2.0 Host
Digital I/Os	2 Inputs / 4 Outputs
Protection class	IP65 as option
Power consumption	< 5 W
Power supply	12..24 VDC
Ambient temperature:	Operating: 0 to 50 °C
	Storage: -20 to 60 °C
Weight without lens	approx. 195 g
Dimensions without lens (W x H x L)	87,5 x 55 x 37 mm

Model CMOS	Resolution / Sensor	Frame Rate
EC2000	640 x 480 · 1/3"	60 fps
EC2050	752 x 480 · 1/3"	60 fps
EC2200	1280 x 960 · 1/3"	40 fps
EC2210	1280 x 960 · 1/3"	25 fps
EC2300	1280 x 1024 · 1/3"	60 fps
EC2600	2592 x 1944 · 1/3"	5,8 fps

Model CCD	Resolution / Sensor	Frame Rate
EC3000	640 x 480 · 1/3"	90 fps
EC3010	640 x 480 · 1/2"	104 fps
EC3050	750 x 580 · 1/2"	87 fps
EC3200	1280 x 964 · 1/3"	31 fps
EC3300	1360 x 1024 · 1/2"	30 fps
EC3400	1600 x 1200 · 1/1,8"	28 fps
EC3600	2448 x 2050 · 2/3"	10 fps



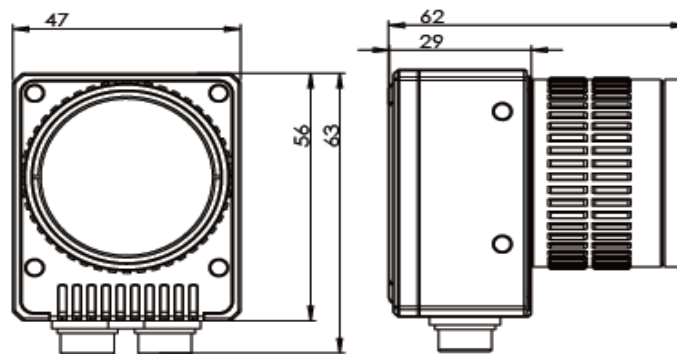


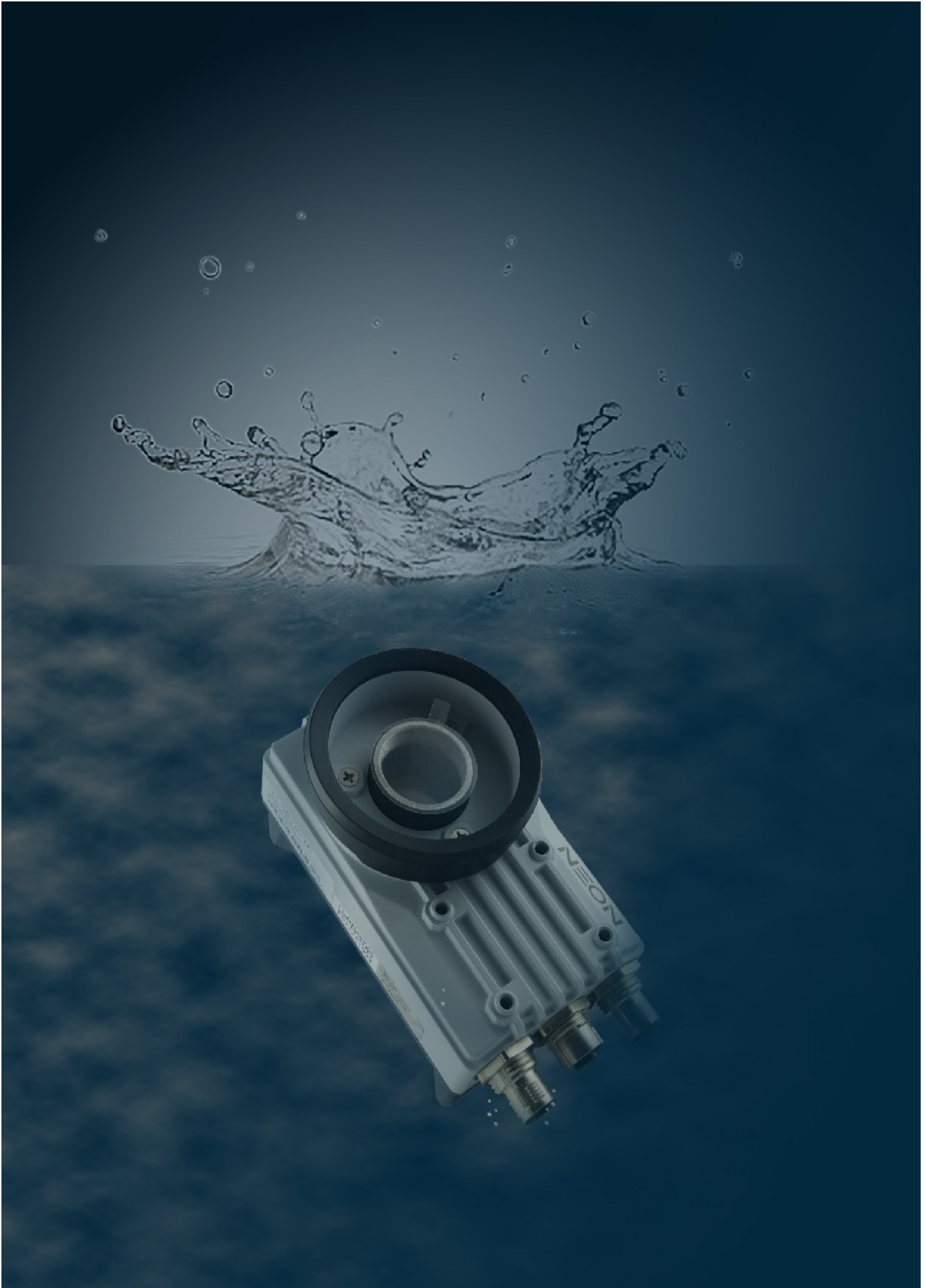
EyeCheck 4xxx series with free programmable FPGA

Technical data

CPU	800MHz / 1GHz Dual Core ARM CORTEX A9
Operating System	Linux
Memory:	
DDR3	512 MB, 1 GB
FLASH	4 GB, 8 GB, 16 GB
Connections:	
	Ethernet 10/100 MBit – 1 GB
	CAN / RS485
Digital I/Os	10 programmierbare I/O
Protection class	IP65
Power consumption	4 W
Power supply	9~ 30 VDC
Material	Metall
Mount	C-Mount, S-Mount
Weight without lens	approx. 120 g
Dimensions without lens (W x H x L)	64 x 47 x 29 mm

Model	Resolution	Sensor	Frame Rate	Mono / Color
EC4000	640 x 480	1/3" CMOS	60	Mono
EC4000C	640 x 480	1/3" CMOS	60	Color
EC4050	752 x 480	1/3" CMOS	60	Mono
EC4050C	752 x 480	1/3" CMOS	60	Color
EC4200	1280 x 960	1/3" CMOS	60	Mono
EC4200C	1280 x 960	1/3" CMOS	60	Color
EC4600	2592 x 1944	2/3" CMOS	30	Mono
EC4600C	2592 x 1944	2/3" CMOS	30	Color
EC4600L	4096 x 1	2/3" CMOS	10000	





EyeCheck 6xxx series

Technical data

Processor	Intel Atom E3845, Quad Core @ 1,91 GHz
Display	VGA connector, max. 2560 x 1600 @ 60 Hz
Memory:	RAM: 2 GB DDR3L
	16 to 32 GB SSD
Advanced Processing	ROI, LUT, Shading Correction
Sensor Format	Monochrom
Trigger Input	1 x Opto-isoliert Trigger Input
Digital I/Os	4 Input / 4 Output
Ethernet	1 x Gigabit Ethernet
Serial Interfaces	1 x RS232 (only TX and RX)
USB	1 x USB 2.0
Operating System	Windows 7, Windows Embedded Standard 7
Lens Mount	C-Mount
Protection Class	IP67
Power consumption	13 W
Power supply	12..24 VDC +/- 10%
Ambient temperature:	Operating: 0 bis 50 °C
Plug connection	1 x M12 8-pin (Female), 1 x M12 17-pin (Male), 1 x 12-pin (Male)
Weight	approx. 195 g
Dimensions (W x H x L)	68,5 x 110 x 52,7 mm

Model	Resolution	Sensor	Frame Rate	SSD	Megapixel
EC6040-32	2048 x 2048	1" CMOS	60 fps	32 G	4 MP
EC6040-16	2048 x 2048	1" CMOS	60 fps	16 G	4 MP
EC6020-32	2048 x 1088	2/3" CMOS	120 fps	32 G	2 MP
EC6020-16	2048 x 1088	2/3" CMOS	120 fps	16 G	2 MP



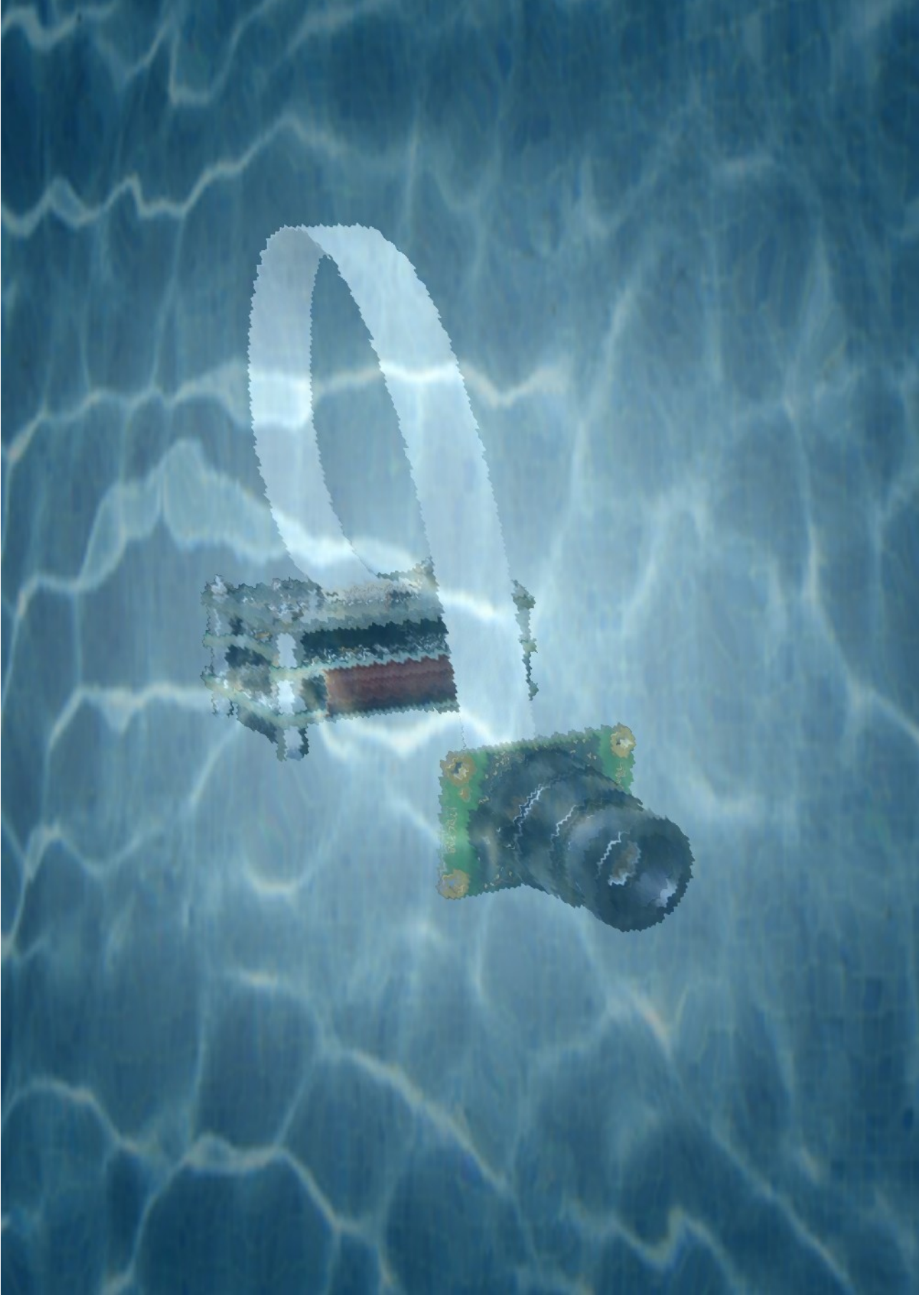
EyeCheck 7xxx series

Technical Data

CPU	Single / Dual Core Cortex-A9 800 MHz
Memory:	
System RAM	512 MB
FLASH	Secure Digital 8 GB (up to 32 GB)
FPGA	XILINX 28K Logical Elements / XILINX Artix-7 28K LEs
FPGA RAM	1 GB (only for model EC7800)
FPGA – CPU Schnittstellen	High Speed Amba bus internal chip
Digital I/Os	2 Inputs / 2 Outputs PNP
Strobe Outputs	2
Encoder Input	3 channels RS422 Line Driver (only for model EC7800)
LAN	Gigabit Ethernet
Serial Interfaces	RS232, RS485
Protection Class	IP67
Lens	C-Mount
Power supply	24 VDC
Operating System	Linux

Model	Resolution	Sensor Type	Sensor Model	Frame Rate
EC7100	640 x 480	1/3" CMOS	-	120 fps
EC7110	640 x 480	1/3" CMOS	CMV300	250 fps
EC7600	2048 x 1024	2/3" CMOS	CMV2000	70 fps
EC7700	2048 x 2048	1" CMOS	CMV4000	35 fps
EC7800	2048 x 2048	1" CMOS	CMV4000	180 fps

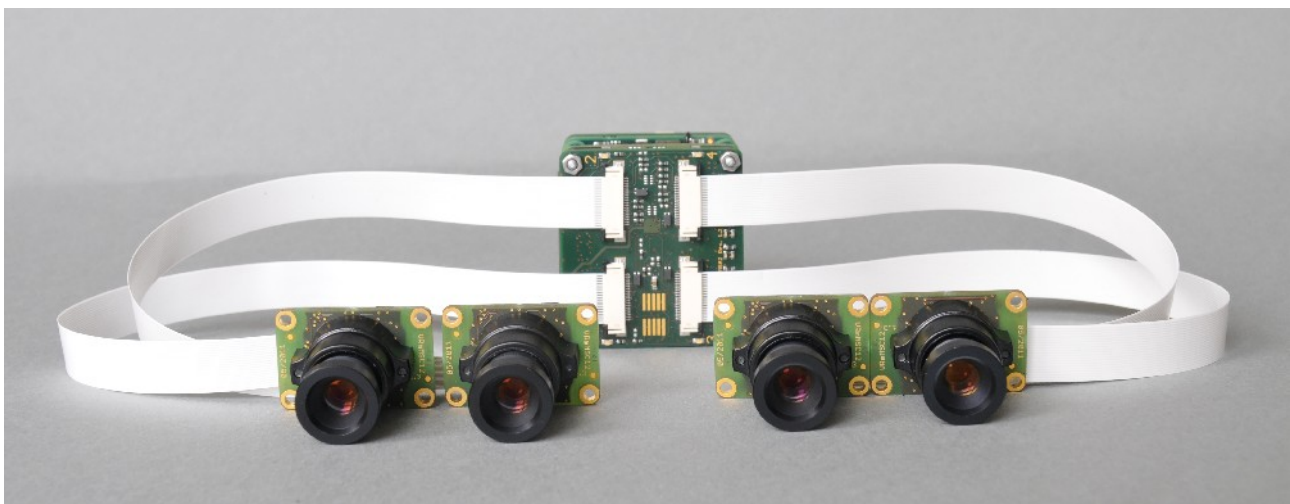




EyeCheck 8xxx series

Technical Data

Operating System	Linux (Debian)
CPU	ARM Cortex-A8, 1GHz
DSP	700 MHz C674x
RAM	2 GB DDR3-800
FLASH Memory	16 GB
SD Card	yes
Ethernet	1 Gbit/s
USB Host / Device	yes / yes
GPIOs	bis zu 44
RS232 / RS485	yes / yes
SATA	yes
CAN Bus	yes
JTAG	yes
Real-time Clock (RTC)	yes
Maximum Video Resolution	1080p
S-Video	yes
RGB888	yes
HDMI	yes
Audio in/out	yes
Wake on LAN	yes





EyeCheck 5xxx series

Technical Data

CPU	X86 1 GHz, VIA EdenULV (L1 Caches 64 KB x2, L2 Caches 128 KB)
Memory	512 MB DDR2 SDRAM
Operating System	Windows
Ethernet	1000 Base-T/A00 Base-TX/10 Base-T
USB	Hi-Speed USB (USB 2.0) (2x)
Serial Interfaces	RS-2322C
Monitor Output	D-Sub 15-polig for Multi-Scan-Monitor
Digital I/Os	Isolated 4 Inputs / 8 Outputs
Aperture control	DC
Power consumption	Max. 17,4 W
Operating voltage	+12 V and +24 V
Lens Mount	C-Mount and CS-Mount
Ambient temperature:	Operating: -5 to 45 °C
	Storage: -30 to 60 °C
Air humidity:	Operating: 20 to 80 % (no condensation)
	Storage: 20 to 95 % (no condensation)
Weight without lens	approx. 760 g
Dimensions without lens (W x H x L)	94 x 70 x 140 mm

Model	Resolution	Sensor	Frame Rate	Processpr
EC5000	640 x 480	1/3" CCD Mono	90 fps	1 GHz
EC5000C	640 x 480	1/3" CCD Color	90 fps	1 GHz
EC5100	1280 x 1024	1/3" CCD Mono	30 fps	1 GHz
EC5100C	1280 x 1024	1/3" CCD Color	30 fps	1 GHz