

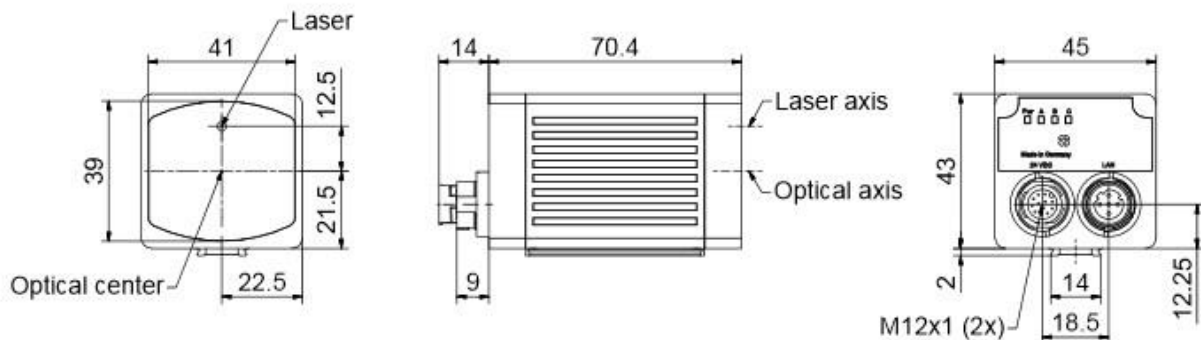
EyeCheck 1xxx Next Generation



Sensor Models

Model	Resolution	Sensor	Focal length	Illumination
EC1110N	800 x 600	1/3.6"	wide	LED: white, red*, infrared*
			medium	LED: white, red*, infrared*
			narrow	LED: white, red*, infrared*
EC1111N	800 x 600	1/3.6"	C-Mount	none
EC1410N	1440 x 1080	1/2.9"	wide	LED: white, red*, infrared*
			medium	LED: white, red*, infrared*
			narrow	LED: white, red*, infrared*
EC1411N	1440 x 1080	1/2.9"	C-Mount	none

* only with monochrome version



EyeCheck Next Generation 1110N „wide“ field of view

Optical Data

Resolution	800 x 600 Pixel
Image chip CMOS	1/3.6", monochrome / color
Integrated lens, focal length [mm]	5.2 (wide)
Pixel size	4,8 µm x 4.8 µm
Focus	Motorized
Adjustment range	0 mm to infinity
Integrierte illumination	LEDs white (5000 K), red (635 nm)*, infrared (850 nm)*
Mindest-Sichtfeld X x Y	2 x 1 mm
Ziellaser	Laser: red (635 nm) Class 1 (IEC 60825-1)

* only with monochrome version

Electrical Data

Operating voltage	18 ... 30 V DC
Current consumption (without I/O)	< 300 mA
Protective circuits	Reverse-polarity protection / short-circuit protection of all outputs
Power on Delay	ca. 13 s after Power on
Outputs	PNP/NPN (switchable)
Max. output current (per output)	50 mA, 100 mA (Pin 12)
Switching threshold inputs incl. encoder	PNP/NPN High > U-1V / Low < 3V
Input resistance	> 20 kOhm
Interfaces	Ethernet (LAN), EtherNet/IP, PROFINET
Inputs/ Outputs	2 inputs, 2 outputs 6 selectable inputs/outputs
Encoder	yes

Mechanical Data

Dimensions	70,4 x 45 x 45 mm (ohne Stecker)
Enclosure rating	IP 67 & IP 65
Material, housing	Aluminium, die-cast, RoHS compliant
Material, front screen	Plastic
Ambient temperature: operation	0 ... +50 °C
Ambient temperature: storage	-20 ... +60 °C
Weight	ca. 200 g
Plug connection	Supply and I/O M12 12-pin, Ethernet M12 4-pin
Vibration resistance	EN 60068-2-6
Shock resistance	EN 60068-2-27

EyeCheck Next Generation 1110N „medium“ field of view

Optical Data

Resolution	800 x 600 Pixel
Image chip CMOS	1/3.6", monochrome / color
Integrated lens, focal length [mm]	9.6 (medium)
Pixel size	4,8 µm x 4.8 µm
Focus	Motorized
Adjustment range	12 mm to infinity
Integrierte illumination	LEDs white (5000 K), red (635 nm)*, infrared (850 nm)*
Mindest-Sichtfeld X x Y	7 x 3 mm
Ziellaser	Laser: red (635 nm) Class 1 (IEC 60825-1)

* only with monochrome version

Electrical Data

Operating voltage	18 ... 30 V DC
Current consumption (without I/O)	< 300 mA
Protective circuits	Reverse-polarity protection / short-circuit protection of all outputs
Power on Delay	ca. 13 s after Power on
Outputs	PNP/NPN (switchable)
Max. output current (per output)	50 mA, 100 mA (Pin 12)
Switching threshold inputs incl. encoder	PNP/NPN High > U-1V / Low < 3V
Input resistance	> 20 kOhm
Interfaces	Ethernet (LAN), EtherNet/IP, PROFINET
Inputs/ Outputs	2 inputs, 2 outputs 6 selectable inputs/outputs
Encoder	yes

Mechanical Data

Dimensions	70,4 x 45 x 45 mm (ohne Stecker)
Enclosure rating	IP 67 & IP 65
Material, housing	Aluminium, die-cast, RoHS compliant
Material, front screen	Plastic
Ambient temperature: operation	0 ... +50 °C
Ambient temperature: storage	-20 ... +60 °C
Weight	ca. 200 g
Plug connection	Supply and I/O M12 12-pin, Ethernet M12 4-pin
Vibration resistance	EN 60068-2-6
Shock resistance	EN 60068-2-27

EyeCheck Next Generation 1110N „narrow“ field of view

Optical Data

Resolution	800 x 600 Pixel
Image chip CMOS	1/3.6", monochrome / color
Integrated lens, focal length [mm]	20 (narrow)
Pixel size	4,8 µm x 4.8 µm
Focus	Motorized
Adjustment range	100 mm to infinity
Integrierte illumination	LEDs white (5000 K), red (635 nm)*, infrared (850 nm)*
Mindest-Sichtfeld X x Y	14 x 10 mm
Ziellaser	Laser: red (635 nm) Class 1 (IEC 60825-1)

* only with monochrome version

Electrical Data

Operating voltage	18 ... 30 V DC
Current consumption (without I/O)	< 300 mA
Protective circuits	Reverse-polarity protection / short-circuit protection of all outputs
Power on Delay	ca. 13 s after Power on
Outputs	PNP/NPN (switchable)
Max. output current (per output)	50 mA, 100 mA (Pin 12)
Switching threshold inputs incl. encoder	PNP/NPN High > U-1V / Low < 3V
Input resistance	> 20 kOhm
Interfaces	Ethernet (LAN), EtherNet/IP, PROFINET
Inputs/ Outputs	2 inputs, 2 outputs 6 selectable inputs/outputs
Encoder	yes

Mechanical Data

Dimensions	70,4 x 45 x 45 mm (ohne Stecker)
Enclosure rating	IP 67 & IP 65
Material, housing	Aluminium, die-cast, RoHS compliant
Material, front screen	Plastic
Ambient temperature: operation	0 ... +50 °C
Ambient temperature: storage	-20 ... +60 °C
Weight	ca. 200 g
Plug connection	Supply and I/O M12 12-pin, Ethernet M12 4-pin
Vibration resistance	EN 60068-2-6
Shock resistance	EN 60068-2-27

EyeCheck Next Generation 1111N C-Mount

Optical Data

Resolution	800 x 600 Pixel
Image chip CMOS	1/3.6", monochrome / color
Integrated lens, focal length [mm]	C-Mount
Pixel size	4,8 µm x 4.8 µm
Focus	manual
Adjustment range	Dependent on lens
Integrierte illumination	none
Mindest-Sichtfeld X x Y	Dependent on lens
Ziellaser	Laser: red (635 nm) Class 1 (IEC 60825-1)

Electrical Data

Operating voltage	18 ... 30 V DC
Current consumption (without I/O)	< 300 mA
Protective circuits	Reverse-polarity protection / short-circuit protection of all outputs
Power on Delay	ca. 13 s after Power on
Outputs	PNP/NPN (switchable)
Max. output current (per output)	50 mA, 100 mA (Pin 12)
Switching threshold inputs incl. encoder	PNP/NPN High > U-1V / Low < 3V
Input resistance	> 20 kOhm
Interfaces	Ethernet (LAN), EtherNet/IP, PROFINET
Inputs/ Outputs	2 inputs, 2 outputs 6 selectable inputs/outputs
Encoder	yes

Mechanical Data

Dimensions	70,4 x 45 x 45 mm (ohne Stecker)
Enclosure rating	IP 67 & IP 65
Material, housing	Aluminium, die-cast, RoHS compliant
Material, front screen	Plastic
Ambient temperature: operation	0 ... +50 °C
Ambient temperature: storage	-20 ... +60 °C
Weight	ca. 200 g
Plug connection	Supply and I/O M12 12-pin, Ethernet M12 4-pin
Vibration resistance	EN 60068-2-6
Shock resistance	EN 60068-2-27

EyeCheck Next Generation 1410N „wide“ field of view

Optical Data

Resolution	1440 x 1080 Pixel
Image chip CMOS	1/3.6", monochrome / color
Integrated lens, focal length [mm]	6.5 (wide)
Pixel size	3.45 µm x 3.45 µm
Focus	Motorized
Adjustment range	10 mm to infinity
Integrierte illumination	LEDs white (5000 K), red (635 nm)*, infrared (850 nm)*
Mindest-Sichtfeld X x Y	6 x 4 mm
Ziellaser	Laser: red (635 nm) Class 1 (IEC 60825-1)

* only with monochrome version

Electrical Data

Operating voltage	18 ... 30 V DC
Current consumption (without I/O)	< 300 mA
Protective circuits	Reverse-polarity protection / short-circuit protection of all outputs
Power on Delay	ca. 13 s after Power on
Outputs	PNP/NPN (switchable)
Max. output current (per output)	50 mA, 100 mA (Pin 12)
Switching threshold inputs incl. encoder	PNP/NPN High > U-1V / Low < 3V
Input resistance	> 20 kOhm
Interfaces	Ethernet (LAN), EtherNet/IP, PROFINET
Inputs/ Outputs	2 inputs, 2 outputs 6 selectable inputs/outputs
Encoder	yes

Mechanical Data

Dimensions	70,4 x 45 x 45 mm (ohne Stecker)
Enclosure rating	IP 67 & IP 65
Material, housing	Aluminium, die-cast, RoHS compliant
Material, front screen	Plastic
Ambient temperature: operation	0 ... +50 °C
Ambient temperature: storage	-20 ... +60 °C
Weight	ca. 200 g
Plug connection	Supply and I/O M12 12-pin, Ethernet M12 4-pin
Vibration resistance	EN 60068-2-6
Shock resistance	EN 60068-2-27

EyeCheck Next Generation 1410N „medium“ field of view

Optical Data

Resolution	1440 x 1080 Pixel
Image chip CMOS	1/3.6", monochrome / color
Integrated lens, focal length [mm]	12 (medium)
Pixel size	3.45 µm x 3.45 µm
Focus	Motorized
Adjustment range	25 mm to infinity
Integrierte illumination	LEDs white (5000 K), red (635 nm)*, infrared (850 nm)*
Mindest-Sichtfeld X x Y	10 x 8 mm
Ziellaser	Laser: red (635 nm) Class 1 (IEC 60825-1)

* only with monochrome version

Electrical Data

Operating voltage	18 ... 30 V DC
Current consumption (without I/O)	< 300 mA
Protective circuits	Reverse-polarity protection / short-circuit protection of all outputs
Power on Delay	ca. 13 s after Power on
Outputs	PNP/NPN (switchable)
Max. output current (per output)	50 mA, 100 mA (Pin 12)
Switching threshold inputs incl. encoder	PNP/NPN High > U-1V / Low < 3V
Input resistance	> 20 kOhm
Interfaces	Ethernet (LAN), EtherNet/IP, PROFINET
Inputs/ Outputs	2 inputs, 2 outputs 6 selectable inputs/outputs
Encoder	yes

Mechanical Data

Dimensions	70,4 x 45 x 45 mm (ohne Stecker)
Enclosure rating	IP 67 & IP 65
Material, housing	Aluminium, die-cast, RoHS compliant
Material, front screen	Plastic
Ambient temperature: operation	0 ... +50 °C
Ambient temperature: storage	-20 ... +60 °C
Weight	ca. 200 g
Plug connection	Supply and I/O M12 12-pin, Ethernet M12 4-pin
Vibration resistance	EN 60068-2-6
Shock resistance	EN 60068-2-27

EyeCheck Next Generation 1410N „narrow“ field of view

Optical Data

Resolution	1440 x 1080 Pixel
Image chip CMOS	1/3.6", monochrome / color
Integrated lens, focal length [mm]	20 (narrow)
Pixel size	3.45 µm x 3.45 µm
Focus	Motorized
Adjustment range	100 mm to infinity
Integrierte illumination	LEDs white (5000 K), red (635 nm)*, infrared (850 nm)*
Mindest-Sichtfeld X x Y	18 x 14 mm
Ziellaser	Laser: red (635 nm) Class 1 (IEC 60825-1)

* only with monochrome version

Electrical Data

Operating voltage	18 ... 30 V DC
Current consumption (without I/O)	< 300 mA
Protective circuits	Reverse-polarity protection / short-circuit protection of all outputs
Power on Delay	ca. 13 s after Power on
Outputs	PNP/NPN (switchable)
Max. output current (per output)	50 mA, 100 mA (Pin 12)
Switching threshold inputs incl. encoder	PNP/NPN High > U-1V / Low < 3V
Input resistance	> 20 kOhm
Interfaces	Ethernet (LAN), EtherNet/IP, PROFINET
Inputs/ Outputs	2 inputs, 2 outputs 6 selectable inputs/outputs
Encoder	yes

Mechanical Data

Dimensions	70,4 x 45 x 45 mm (ohne Stecker)
Enclosure rating	IP 67 & IP 65
Material, housing	Aluminium, die-cast, RoHS compliant
Material, front screen	Plastic
Ambient temperature: operation	0 ... +50 °C
Ambient temperature: storage	-20 ... +60 °C
Weight	ca. 200 g
Plug connection	Supply and I/O M12 12-pin, Ethernet M12 4-pin
Vibration resistance	EN 60068-2-6
Shock resistance	EN 60068-2-27

EyeCheck Next Generation 1411N C-Mount

Optical Data

Resolution	1440 x 1080 Pixel
Image chip CMOS	1/3.6", monochrome / color
Integrated lens, focal length [mm]	C-Mount
Pixel size	4,8 µm x 4.8 µm
Focus	manual
Adjustment range	Dependent on lens
Integrierte illumination	none
Mindest-Sichtfeld X x Y	Dependent on lens
Ziellaser	no

Electrical Data

Operating voltage	18 ... 30 V DC
Current consumption (without I/O)	< 300 mA
Protective circuits	Reverse-polarity protection / short-circuit protection of all outputs
Power on Delay	ca. 13 s after Power on
Outputs	PNP/NPN (switchable)
Max. output current (per output)	50 mA, 100 mA (Pin 12)
Switching threshold inputs incl. encoder	PNP/NPN High > U-1V / Low < 3V
Input resistance	> 20 kOhm
Interfaces	Ethernet (LAN), EtherNet/IP, PROFINET
Inputs/ Outputs	2 inputs, 2 outputs 6 selectable inputs/outputs
Encoder	yes

Mechanical Data

Dimensions	70,4 x 45 x 45 mm (ohne Stecker)
Enclosure rating	IP 67 & IP 65
Material, housing	Aluminium, die-cast, RoHS compliant
Material, front screen	Plastic
Ambient temperature: operation	0 ... +50 °C
Ambient temperature: storage	-20 ... +60 °C
Weight	ca. 200 g
Plug connection	Supply and I/O M12 12-pin, Ethernet M12 4-pin
Vibration resistance	EN 60068-2-6
Shock resistance	EN 60068-2-27