XCU3 COMPACT

XCU3 316L 2MP AI-prepared compact camera, H.264/H.265

DESCRIPTION

Rugged stainless-steel camera for demanding environments. The XCUv3 Compact is available with a 10x motorized lens and autofocus for rapid deployment and remote installation. The XCU3 and its accessories are double protected against corrosion; they are entirely made of powder-coated stainless-steel (316L). The housing is sealed against water and dust, which makes it ideal for harsh environments like traffic, tunnels, marine, offshore, heavy industry, waste management, etc. With its built-in the neural processor (NPU), quad-core Arm Cortex and GPU the XCU3 is prepared for intelligent edge based AI algorithms.

FEATURES

2.1 MP

10x motorized zoom

H.264 and H.265 streaming

Powerful quad-core Arm Cortex

2.3 TOPS Neural processor for ML or AI

Compact, robust, and corrosion free

powder-coated 316L stainless steel housing

Longevity of 10 years

Hydrophobic optical window

Water and dust tight: IP66 & IP67

1 GBE (electrical or optical)

Support for ONVIF Profile S and G

Description

The XCU3 Compact Camera is designed to operate under the tough environmental conditions in traffic (tunnels) and marine (offshore) applications. The housing and brackets are made from high grade 316L stainless steel, powder-coated (RAL9016) for the best protection against corrosive substances and environments.

Plug & Play
Installing and commissioning IP cameras is made easy with the XCUv3 Compact. It slides into place on the XCU versatile mounting accessories and is operational by connecting powered Ethernet. No need to open the unit; all connections can be prepared in advance.

Integrated 10x zoom Full-HD
The XCU3 Compact is available with a mid-range 5 mm to 50 mm (10x) optical zoom, which offers the ideal coverage of the scene from almost any camera position. Remote zoom and focus allows you to define and configure the field-of-view afterwards, without the need to open the camera. The ultra-low light performance makes this a versatile camera for a wide range of applications.

Open standards
Out of the box, the XCU3 Compact integrates with the common VMS systems. Being compliant to the ONVIF Profile S and G specifications, the camera is supported by most video management systems. When needed, the camera can be controlled through a comprehensive HTTP API (Siqura Programming Interface). This specifically enables deployment in projects with custom requirements.

Multi-streaming and multicasting
The XCU3 Compact has multi-streaming capabilities for simultaneous transmission of one or more H.264 or H.265 streams. This guarantees interoperability with existing VMS systems. Multiple combinations of resolution and frame rate can be configured to satisfy different live-viewing and recording scenarios. In addition, multicasting is supported for complex, multi-user video networks.

Image enhancements
The XCU3 Compact has a full set of image enhancement tools on-board to improve the image for the actual application. The adjustable white balance and hue can compensate for varying lighting conditions. Back-light compensation and wide dynamic range

functions enhance image quality in difficult lighting situations, ensuring quality pictures even in case of challenging scenes.

Connectivity
The XCU3 Compact comes standard with IP67 connectors for 1 Gigabit Ethernet connection and power connector. It is optionally available for 1GBE single mode or multimode fiber connections. The XCU3 is powered either by power-over-Ethernet (PoE) or by 24 Vac or Vdc.

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Camera housing

Body material	316L stainless steel
Finishing	Powder coated (RAL9016)
Sunshield	316L powder coated (RAL9016)
Heater/Demister	Standard
Ingress protection	IP66, IP67
Corrosion Class	C5 (ISO 12944)
Impact rating casing	IK10
Solar radiation test	MIL-STD-810, method 505.4 (p.4)
Shock test (transportation)	MIL-STD-810, method 516.5
Vibration (IEC 50068-2-6)	10 Hz to 150 Hz, 0.5g, all 3 axes, 1 oct/min, 1 sweep
Max wind velocity	240 km/h (150 mph)
Operating temperature	-34 °C to +74 °C (-29 °F to 165 °F) - per Nema TS-2
- Continuous (sheltered, air temp)	-30 °C to +55 °C (-22 °F to 131 °F)
- Cold start	-30°C (-22 °F)
Relative Humidity	5% to 100%
Dry heat test	+75 °C, 24 hours
Weight	2.0 kg (2.5 kg incl. packaging)

Imager and lens

Motorized zoom	10x zoom
Image sensor	1/3"Progressive scan CMOS
Effective pixels	1920(H) x 1080(V), 2.1Mp
Minimum scene illumination	0.02 lux color, 0.005 lux B/W f/1.6
Lens	5.1 to 51 mm
Horizontal field of view	54° (W) to 4.9°(T)
Lens type	motorized zoom
Dynamic WDR	120dB
Shutter speed	1/25 - 1/30,000 s
Features	BLC, HLC, auto/manual white balance, noise reduction, defog
Digital Image Stabilization	Yes (10x zoom only)
Exposure	Auto/Manual/Iris priority/shutter priority
Day/Night (IR-cut filter)	Auto/Manual
Focus	Auto, manual, push-to-focus

Video stream

Number of streams	2x
Aspect ratio	16:9, 16:10, 5:4, 4:3 (cropped, no scaling)
Compression algorithm(s)	AVC/H.264 (MP), HEVC/H.265
Supported output resolutions	1920x1080; 1280x1024; 1280x720; 720x576; 704x576; 640x480; 480x576, 352x576; 704x288; 352x288; 320x240; 176x144
Compression bit rate control	Variable bit rate (VBR)
Output bit rate (per stream)	Up to 6Mb/s
Max latency	125 ms

Specs

Video stream

Number of video output streams	Up to 20 (RTSP) per input
Total output data rate (max)	50Mb/s
Video overlay	3x Text lines

Analytics

AI prepared	2.3 TOPS NPU

Electrical

Supply voltage	AC 24 V (+/- 4 V) 50/60 Hz; DC 24 V (+/- 4V); or PoE(+)
Max. power consumption	10x zoom
	7 W nominal, 12 W max
PoE	IEEE802.3af or IEEE802.at type I
Power connector	3-pin 7/8" Conec
Network connector	Conec RJ45

Network

Interface(s)	100/1000 Mb Ethernet, auto negotiating, MDI/MDX
- 2SM models	Single mode SFP: "SFP SM 1310 20km 1Gb", dual LC (1310nm, 20km, 1GBE)
- 2MM models	Multimode SFP: "SFP MM 1310 2km 1000Mb", dual LC (1310, 2km, 1GBE)
Protocols	IPv4, TCP/IP, UDP, RTP, RTSP, RTCP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP,
	IGMP, QoS, NTP, ONVIF, TLS1.2, TLS1.3, IEEE802.1x*, SPI
Password levels	Viewer, User and Administrator
Supported browsers	Internet Edge, Chrome, Firefox, Safari
User accounts	20

Ordering information

XCU3-C M10	316L 2MP AI-prepared compact camera, h.264/h.265, 10x zoom
XCU3-C M10-2SM	316L 2MP AI-prepared compact camera, h.264/h.265, 10x zoom, 2SM
XCU3-C M10-2MM	316L 2MP AI-prepared compact camera, h.264/h.265, 10x zoom, 2MM

Mounting accessories

XCUWM01	XCU 316L Wall/Pole mount with swivel, RAL9016
XCUCM01	XCU 316L Rugged ceiling mount, RAL9016
XCUSW01	XCU 316L Swivel mount (swivel only), RAL9016

Cable connectors

XCUCNC-PWR01	XCU IP67 power connector straight, cable part (included)
XCUCNC-RJ45	XCU IP67 Ethernet connector straight, cable part (included)

220

4 x M4 ⤓10

92.62

126.6