

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)

ONVIF Profile S conformant



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 (Siqua 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.

(c) 20260429

| 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, MJPEG |
| 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

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

Analytics

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| AI prepared | 2.3 TOPS NPU |
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Electrical

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|------------------------|---|
| 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

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|--------------------|---|
| 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

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|----------------|---|
| 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

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|---------|---|
| 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

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

