

# RoughCam® IPQ1656



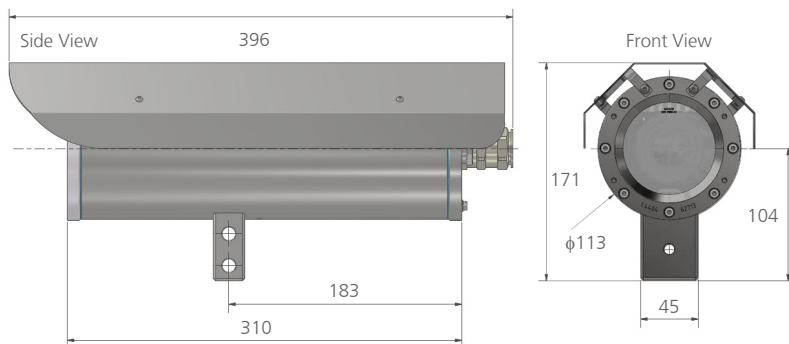
## Datasheet.

### Features.

- ✓ Extremely robust Camera for **Demanding Environments**
- ✓ **Deep Learning Processing Unit (DLPU)** for **Artificial Intelligence (AI)** Applications
- ✓ Granular **Object Classification**
- ✓ Ki-based **Dynamic Privacy Shield**
- ✓ High Resolution: **4MP (QuadHD)** at up to 60 fps)
- ✓ Powerful Remote Zoom and Focus Lens (**supports i-CS**)
- ✓ High Light Sensitivity with **1/1.8" CMOS Sensor**
- ✓ **Arctic-Temperature-Control** (-60°C)
- ✓ **Single-Cable-Solution** (PoE / 24VDC)
- ✓ Protection Level of **IP68** (IEC 60529)
- ✓ Electronic Image Stabilization (**EIS**)
- ✓ Optional with cool.Jacket for use to +130°C



### Dimensions [mm].



### Models.

T10- VA.2.3.K3.BOR2- X. X- XXX. X- X

↓

P = Plug RJ45 cable connector (standard)  
 T = Terminal box connection

↓

N = Non armoured cable (standard)  
 A = Armoured cable

↓

— = Cable lenght (see UM) (005 = standard)

↓

H = High temp. battery installed ( $T_{amb} \leq +60^{\circ}\text{C}$ )  
 HH = Optional: Active cooling system ( $T_{amb} \leq +130^{\circ}\text{C}$ )

↓

N = Normal temp., no heater installed ( $T_{amb} \geq -20^{\circ}\text{C}$ )  
 LL = Low Low temp., PTC heater installed ( $T_{amb} \geq -60^{\circ}\text{C}$ )

↓

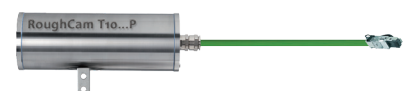
VA2.3.K3.BOR2 = Camera in stainless steel enclosure 1.4404

↓

T10 = Camera type No. 10, cameras for safe areas

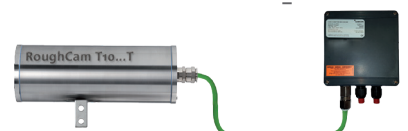
### Plug Termination.

T10- VA2.3.K3.BOR2-X.X-XXX.X-P



### Terminal Box Termination.

T10- VA2.3.K3.BOR2-X.X-XXX.X-T



## Data.

# RoughCam® IPQ1656



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IP66

### Mechanical Characteristics (CAM/TB)

Protection level (CAM/TB):  
Weight:

Stainless Steel (AISI 316L/1.4404), Polyester resin  
IP66/68, IP66 (IEC/EN 60529)  
7.9 kg

IP68

### Range of temperature

Type ...N.H:  
Type ...LL.H:  
Type ...N.HH:

-20°C bis +60°C  
-60°C bis +60°C  
-20°C bis +130°C\*\*



### Camera power supply Heater power supply



IEEE 802.3af/802.3at Type 1 Class 3, typical 5.1 W, max 8.2 W  
40W@24VDC@-60°C (see user manual)

### Connection cable type

WWW.SAMCON.EU SKD01-T / Cat.6 / 4x2xAWG22/1  
ASK02-T / (A)SKDP03-T / Cat.6 / AWG23/1  
SKD05-HT / Cat.6 / 4x2xAWG26/7 (Option cool.Jacket)  
9 mm - 17 mm

Outside diameter:



### Lens

Type:  
Field of view:  
Minimum illumination:

IR corrected i-CS lens; 3.9 – 10 mm, F1.5  
HfOV: 100° – 47°, VfoV: 63° – 27°  
Color: 0.05 lux at 50 IRE F1.5, B/W: 0.01 lux at 50 IRE F1.5 (at 25/30 fps with WDR and Lightfinder)  
Color: 0.1 lux at 50 IRE F1.5, B/W: 0.02 lux at 50 IRE F1.5 (at 50/60 fps with Lightfinder)  
1 cm

Minimum Object Distance:



### Camera

Image sensor:  
Shutter time:  
Videocompression:

4MP  
1520p

Resolution:  
Frame rate:

Video streaming:

Multi-View Streaming:  
Image settings:

Pan/Tilt/Zoom:  
Edge storage:

1/1.8" progressive scan RGB CMOS  
1/47500 s to 1 s  
H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles,  
H.265 (MPEG-H Part 2/HEVC) Main Profile, Motion JPEG  
16:9 2688x1512 QuadHD to 160x90; 4:3 2016x1512 to 160x120  
Up to 60/50 fps (60/50 Hz) in all resolutions (no WDR);  
Up to 30/25 fps (60/50 Hz) in all resolutions  
Multiple, individually configurable streams in H.264, H.265 and Motion JPEG;  
Axis Zipstream technology  
in H.264 and H.265; Controllable frame rate and bandwidth,  
VBR/ABR/MBR H.264/H.265  
Up to 8 individually cropped out view areas  
Saturation, contrast, brightness, Forensic WDR, white balance, day/night threshold, tone mapping,  
exposure mode, exposure zones, defogging, electronic image stabilization, compression,  
barrel distortion correction, dynamic text and image overlay, polygon privacy masks, mirroring of images,  
rotation: 0°, 90°, 180°, 270° including Corridor Format  
Digital PTZ, preset positions, uploadable PTZ driver, Remote Zoom and Remote Focus  
SD/SDHC/SDXC slot supporting memory card (card not included);  
Support for recording to dedicated network-attached storage (NAS)



### Network

Security:

Supported protocols:

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), IEEE 802.1AR, HTTPS/HSTS, TLS v1.2/v1.3, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall, signed firmware, brute force delay protection, digest authentication, password protection, AXIS Edge Vault, ...  
IPv4/v6, USGv6, HTTP, HTTPS, HTTP/2, TLS, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP, SNMPv1/v2c, v3(MIB-II), DNS, DynDNS, NTP, NTS, RTSP, RTP, TCP, UDP, IGMP, etc...



### System integration

Application Programming Interface:

Analytics Included:

Event triggers:  
Event actions:

Data streaming:  
Built-in installation aids:

Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at [www.axis.com](http://www.axis.com); AXIS Video Hosting System (AVHS) with One-Click Connection; ONVIF® Profile S, ONVIF® Profile M, ONVIF® Profile T and ONVIF® Profile G, specification at [onvif.org](http://onvif.org) Deep Learning Processing Unit (DLPU), AXIS Object Analytics, AXIS Motion Guard, AXIS Loitering Guard, AXIS Video Motion Detection, active tampering alarm, audio detection, gatekeeper Supported AXIS Perimeter Defender, AXIS Cross Line Detection, Support for AXIS Camera Application Platform enabling installation of third-party applications, see [www.axis.com/acap](http://www.axis.com/acap)  
Analytics, edge storage events, supervised external input, edge storage events, virtual inputs through API  
Pre- and post-alarm video buffering  
File upload: FTP, SFTP, HTTP, HTTPS, network share and email  
Notification: email, HTTP, HTTPS, TCP and SNMP trap  
wEvent data  
Remote zoom and focus, remote back focus, leveling assistant, pixel counter

### Optional accessories

Wall mount bracket, Pole mount bracket, Ceiling mount bracket, cool.Jacket  
Non-armoured cable kits, Armoured cable kits, ExConnection Rails, ...

\* = Illustrations show models with accessories that are subjected to an extra charge

\*\* = This model requires the SAMCON cool.Jacket. The cooling water according to the requirements must be available or be produced.

