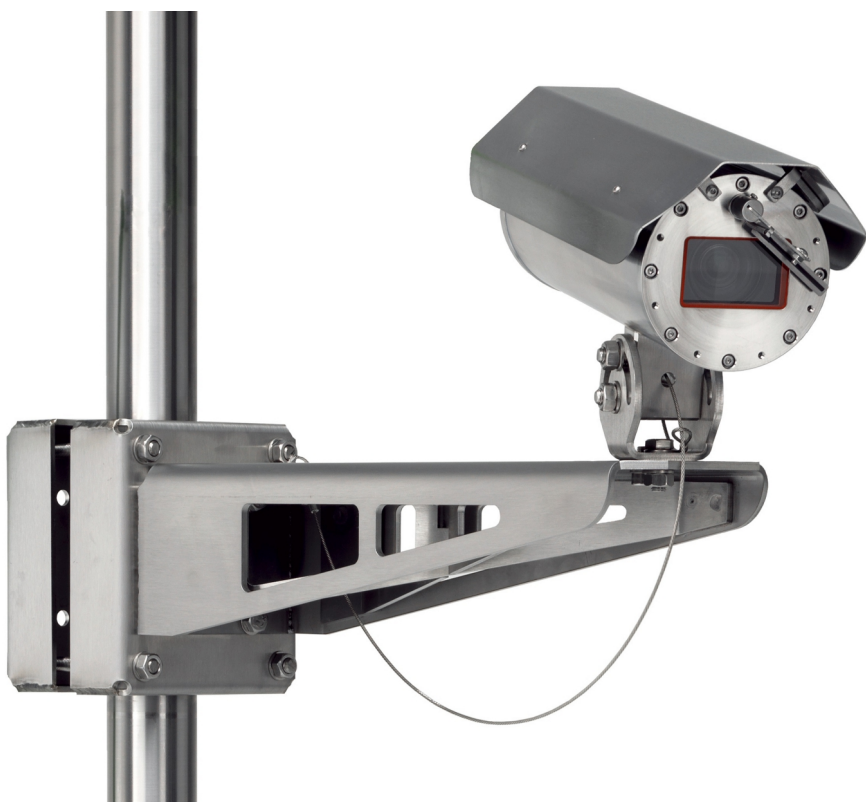# ExCam XF Q1785 Explosion-Protected Network Camera

Zone-certified fixed camera with 32x zoom

ExCam XF Q1785 Explosion-Protected Network Camera is an easy-to-install and easy-to-integrate camera. It delivers superb zoomed-in detail you expect from a top-of-the-line fixed box camera from Axis. The electronic image stabilization greatly improves video quality where the camera is subject to vibrations. The camera is adapted for explosion-prone applications with ATEX, IECEx, EAC Ex, INMETRO and IA certifications. With PoE support for plug-and-play installation, ExCam XF Q1785 offers significant savings. Lightfinder and Forensic WDR technologies ensure perfect balance in scenes with strong variations in light, even in poor light. Suitable for onshore, offshore, marine, and heavy industrial environments.

> Certified for ATEX, IECEx, EAC Ex, INMETRO and IA; Zones 1, 2, 21, and 22; Groups IIC and IIIC

> Cost-efficient installation with PoE

> HDTV 1080p with 32x optical zoom

> Lightfinder and WDR technologies

> Electronic image stabilization (EIS)

ExCam XF Q1785 Explosion-Protected Network Camera

Camera

Image sensor	1/2.8" progressive scan RGB CMOS
Lens	Varifocal 4.3–137 mm, F1.4–4.0 Horizontal field of view: 60°–2.3° Vertical field of view: 39°–1.3° Autofocus
Minimum illumination	Color: 0.16 lux at 50 IRE F1.4 B/W: 0.03 lux at 50 IRE F1.4
Shutter speed	1/66500 s to 1 s

System on chip (SoC)

Model	ARTPEC-6
Memory	1024 MB RAM, 512 MB Flash

Video

Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG
Resolution	1920x1080 HDTV 1080p (16:9) to 160x120 (4:3) **Maximum pixel density with 32x optical zoom:** **25 m (82 ft):** 1912 px/m **50 m (164 ft):** 956 px/m **250 m (820 ft):** 191 px/m
Frame rate	With WDR: Up to 25/30 fps (50/60 Hz) in all resolutions Without WDR: Up to 50/60 fps (50/60 Hz) in all resolutions
Video streaming	Up to 20 unique and configurable video streams[a] Axis Zipstream technology in H.264 Controllable frame rate and bandwidth VBR/MBR H.264
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR: Up to 120 dB depending on scene, defogging, white balance, exposure mode, exposure zones, compression, mirroring of images, electronic image stabilization, barrel distortion correction, text and image overlay, dynamic text and image overlay, privacy masks Rotation: auto, 0°, 90°, 180°, 270° including Corridor Format Scene profiles: forensic, vivid, traffic overview, backlit entrance
Pan/Tilt/Zoom	Digital ptz Zoom: 32x Optical, 12x Digital, Total 384x Preset positions

Network

Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS, TLS, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)

System integration

Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com* One-click cloud connection ONVIF® Profile G, ONVIF® Profile S, and ONVIF® Profile T, specification at *onvif.org*
Event triggers	Analytics, supervised external input, edge storage events, virtual inputs through API, shock detection MQTT subscribe
Event actions	Pre- and post-alarm video buffering File upload: FTP, SFTP, HTTP, HTTPS, network share and email MQTT publish Notification: email, HTTP, HTTPS, TCP and SNMP trap
Data streaming	Event data
Built-in installation aids	Remote zoom, pixel counter, leveling assistant, autorotation

Analytics

Applications	**Included** AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard AXIS Video Motion Detection, active tampering alarm, gatekeeper **Supported** AXIS Perimeter Defender Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*

Cybersecurity

Edge security	**Software:** Signed firmware, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 OpenID Authorization Code Flow for centralized ADFS account management, password protection
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), IEEE 802.1AE (MACsec PSK/EAP-TLS), HTTPS/HSTS, TLS v1.2/v1.3, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall
Documentation	*AXIS OS Hardening Guide* *Axis Vulnerability Management Policy* *Axis Security Development Model* AXIS OS Software Bill of Material (SBOM) To download documents, go to *axis.com/support/cybersecurity/resources* To read more about Axis cybersecurity support, go to *axis.com/cybersecurity*

General

Casing	IP68-rated, ASTM 316L (EN 1.4404) stainless steel casing for maximum corrosion protection Wiper included De-icing control[b] Casing manufactured and certified by Samcon Prozessleittechnik GmbH, *samcon.eu*
Sustainability	PVC free
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 7.7 W, max 12.95 W 24 V DC, max 40 W 24 V DC is required for operating at temperatures below 0 °C (32 °F) and for wiper functionality
Connectors	EXTB-3 Junction Box ExCam: 10 terminal clamp UT 2.5 2 conductor terminal USLKG 5
Storage	Pre-installed AXIS Surveillance microSDXC Card 128 GB Support for SD card encryption (AES-XTS-Plain64 256bit) Support for recording to network-attached storage (NAS) For SD card and NAS recommendations see *axis.com*
Operating conditions	-60 °C to 60 °C (-76 °F to 140 °F) Maximum temperature (intermittent): 75 °C (167 °F) Humidity 10-100% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5-95% RH (non-condensing)
Approvals	**EMC** EN 55032 Class A, EN 61000-6-2, EN 61000-3-2, EN 61000-3-3, EN 62479, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11 **Safety** IS 13252 **Environment** IEC/EN 60529 IP68 **Explosion** DIN EN/IEC 60079-0, DIN EN/IEC 60079-1, DIN EN/IEC 60079-7, DIN EN/IEC 60079-31, TR CU 012/2011, GOST R IEC 60079-0, GOST IEC 60079-1, GOST R IEC 60079-7, GOST R IEC 60079-31 **Network** NIST SP500-267
Certifications	**Camera:** **Model key:** T08-VA2.3.K3.BOR5-LL.H-005.A-T **ATEX:** II 2 G Ex db IIC T5 Gb, II 2 D Ex tb IIIC T95°C Db **Certificate:** TÜV 18 ATEX 8218X **IECEx:** Ex db IIC T5 Gb, Ex tb IIIC T95°C Db **Certificate:** IECEx TUR 18.0023X **IA:** Ex db IIC T5 Gb, Ex tb IIIC T95°C Db **Certificate:** MASC MS/18-3256X **EAC Ex:** 1Ex db IIC T5 Gb, Ex tb IIIC T95°C Db **Series:** T8, **Model:** T08-VA2.3. **Certificate:** RU C-DE.HA65.B.01652/22 **UKCA:** II 2 G Ex db IIC T5 Gb, II 2 D Ex tb IIIC T95 °C Db **Certificate:** TÜV 22 UKEX 7137 X **EXTB-3 Junction Box ExCam:** **Model key:** T12-3M20 **ATEX:** II 2 G Ex eb IIC T5 Gb, Ex II 2 D Ex tb IIIC T95°C Db IP66

Certificate: PTB 99 ATEX 3103
IECEx: Ex e IIC T5 Gb, Ex IIIC T95°C Db IP66
Certificate: IECEx PTB 06.0026
EAC Ex: 1Ex e IIC T5 Gb X, Ex tb IIIC T95°C Db X
Certificate: RU C-HA91.B.00240/21
PESO: Ex db IIC T6 Gb
Certificate: A/P/HQ/KA/104/5735
INMETRO: Ex db IIC T5 Gb, Ex tb IIIC T95°C Db
Certificate: TÜV 23.0363X

Dimensions	396 x 135 x 171 mm (15 9/16 x 5 5/16 x 6 3/4 in)
Weight	11.1 kg (24.5 lb)
Included accessories	Installation Guide, Windows decoder 1-user license, Weathershield ExCam XF, ASKDP03-T Cable ExCam 5 m (16 ft), EXTB-3 Junction Box ExCam, AXIS Surveillance microSDXC Card 128 GB
Optional accessories	Wall Mount ExCam XF, Pole Mount ExCam XF Non-armored cables ExCam, 10, 25, 95 m (33, 82, 312 ft), Armored cables ExCam, 10, 25, 95 m (33, 82, 312 ft)

Ex Connection Rail 4 PoE PS 24, Ex Connection Rail 8 PoE PS 24
For more accessories, see *axis.com*

Video management software	AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at *axis.com/vms*
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
Warranty	5-year warranty, see *axis.com/warranty*

a. *We recommend a maximum of 3 unique video streams per camera or channel, for optimized user experience, network bandwidth, and storage utilization. A unique video stream can be served to many video clients in the network using multicast or unicast transport method via built-in stream reuse functionality.*
b. *Internal heaters to defrost ice build-up, activated by HTTP API (VAPIX).*

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