AXIS M31-R Network Camera Series
Compact, rugged network cameras for mobile video surveillance

> Flat, rugged design

> Progressive scan and megapixel/HDTV

> Multiple H.264 and Motion JPEG streams

> Quick and reliable installation

> Active tampering alarm

The high-performance AXIS M31-R Network Cameras are specially designed for video surveillance in buses, trains, subway cars and emergency vehicles.

The rugged and discreet AXIS M31-R cameras have protection against dust and water, and can withstand tough conditions such as vibrations, shocks, bumps and temperature fluctuations. In addition, the cameras' active tampering alarm can detect tampering attempts such as blocking or spray-painting.

The series includes AXIS M3113-R cameras with SVGA resolution and AXIS M3114-R cameras that can stream 1 megapixel, as well as HDTV 720p, at full frame rate.

The cameras are specially adapted to respond quickly to changes in light levels, ensuring that high image quality is maintained. In addition, the use of progressive scan enables the cameras to show moving objects without distortion.

AXIS M31-R cameras can provide multiple H.264 and Motion JPEG streams simultaneously. H.264 compression greatly optimizes bandwidth and storage without compromising image quality.

The cameras are designed for quick and reliable installation. The desired field of view and a leveled image can be easily achieved by using the supplied lens tool to direct and rotate the ball that holds the lens and image sensor. The tool can also be used to exchange and focus the lens when a lens with a different angle of view is required. The cameras provide a pixel counter for verifying that the pixel resolution of an object meets specific requirements. Power over Ethernet support further simplifies installation since only one cable is needed for carrying power and video.

Technical Specifications - AXIS M31-R Network Camera Series

Models	
	AXIS M3113–R: SVGA, rugged RJ45 connector, 2.8 mm lens
	AXIS M3113–R M12: SVGA, M12 connector, 2.8 mm lens
	AXIS M3114–R: 1 MP, rugged RJ45 connector, 2.8 mm lens
	AXIS M3114–R M12: 1 MP, M12 connector, 2.8 mm lens
	AXIS M3114–R M12 2 mm: 1 MP, M12 connector, 1.97 mm lens

Camera

Image sensor	1/4" progressive scan RGB CMOS
Lens	M12 mount, fixed iris, megapixel resolution AXIS M3113–R/M12: 2.8 mm, 66° view[a], F2.0 AXIS M3114–R/M12: 2.8 mm, 80° view[a], F2.0 AXIS M3114–R M12 2 mm: 1.97 mm, 105° view[a], F3.0
Light sensitivity	AXIS M3113–R/M12, AXIS M3114–R/M12: 1–100000 lux, F2.0 AXIS M3114–R M12 2 mm: 1–100000 lux, F3.0
Shutter time	1/24500 s to 1/6 s
Camera angle adjustment	Pan ± 30°, Tilt 0-90°, Rotation ± 180°

Video

Video compression	H.264 (MPEG-4 Part 10/AVC) Motion JPEG
Resolutions	AXIS M3113–R (all models): 800x600 to 160x90 AXIS M3114–R (all models): 1280x800[b] to 160x90
Frame rate	30 fps in all resolutions
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG, Controllable frame rate and bandwidth, VBR/CBR H.264
Pan/Tilt/Zoom	Digital PTZ, Preset positions, Guard tour
Image settings	Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control, Exposure zones, Backlight compensation, Fine tuning of behavior at low light, Wide dynamic range – dynamic contrast, Text and image overlay, Mirroring of images, Privacy mask Rotation: 0°, 90°, 180°, 270°, including Corridor Format

Network

Security	Password protection, IP address filtering, HTTPS[c] encryption, IEEE 802.1X[c] network access control, Digest authentication, User access log
Supported protocols	IPv4/v6, HTTP, HTTPS[c], SSL/TLS[c], QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS

System integration

Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at www.axis.com AXIS Video Hosting System (AVHS) with One-Click Camera Connection ONVIF Profile S, specification at www.onvif.org

Intelligent video	Video motion detection, Active tampering alarm, AXIS Camera Application Platform
Event triggers	Intelligent video
Event actions	File upload: FTP, HTTP, network share and email Notification: email, HTTP and TCP Video recording to edge storage, Pre- and post-alarm video buffering, External output activation
Data streaming	Event data
Built-in installation aids	Pixel counter

General

Casing	IP66-, IP67- and NEMA 4X-rated, IK08 impact-resistant aluminum and polycarbonate casing, Dehumidifying membrane, Captive screws, Not designed for mounting outside a vehicle
Memory	128 MB RAM, 128 MB Flash
Power	Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 1, max 3.2 W
Connectors	AXIS M31–R: Rugged, female RJ45 10BASE-T/100BASE-TX AXIS M31–R M12: Rugged, female, D-coded M12 connector with rotatable coupling nut, All connectors support Power over Ethernet
Edge storage	Support for recording to dedicated network-attached storage (NAS)
Operating conditions	-25 °C to 50 °C (-13 °F to 122 °F) Humidity 15–100% RH (condensing)
Approvals	EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 50121-4, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class B, ICES-003 Class B, VCCI Class B, C-tick AS/NZS CISPR 22 Class B, EN 60950-1, EN 60950-22, IEC 60529 IP66/IP67, NEMA 250 Type 4X, ECE R10 rev.03 (E approval), IEC 60721-3-4 Class 4K3 (temperature range -25 °C to 50 °C), EN 50155 Class T3 (vibration, shock, bump, temperature), ISO 16750-3 (vibration), IEC 62262 Class IK08, AFNOR NF F16-101, E DIN 5510-2, UNI CEI 11170
Weight	250 g (0.55 lb)
Included accessories	Lens tool, Top cover tool, Drill hole template, Mounting adapters, Installation Guide, Installation and Management Software CD, Windows decoder 1-user license
Video management software	AXIS Camera Companion (included), AXIS Camera Station and video management software from Axis' Application Development Partners (not included). For more information, see www.axis.com/products/video/software
Warranty	Axis 3-year warranty, see www.axis.com/warranty

a. *Horizontal angle of view*
b. *1440x900 (1.3 MP) scaled resolution available via VAPIX®*
c. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

More information is available at **www.axis.com**

Dimensions

ø 107 mm (4.2")
ø 109 mm (4.3")
36 mm (1.4")
48 mm (1.9")

Optional accessories

1. *M12 mount lenses (not applicable for 2 mm version)*
2. *RJ45/M12 connectors (compatible with camera connectors)*
3. *AXIS T8414 Installation Display*

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