

## 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.

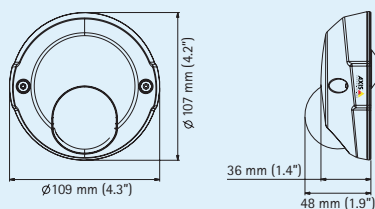


## Technical specifications – AXIS M31-R Network Camera Series

| Camera                         |  | System integration                       |  |
|--------------------------------|--|--|--|
| <b>Models</b>                  | AXIS M3113-R: SVGA, rugged RJ-45 connector, 2.9 mm lens<br>AXIS M3113-R M12: SVGA, M12 connector, 2.9 mm lens<br>AXIS M3114-R: 1 MP, rugged RJ-45 connector, 2.9 mm lens<br>AXIS M3114-R M12: 1 MP, M12 connector, 2.9 mm lens<br>AXIS M3114-R M12 2 mm: 1 MP, M12 connector, 1.97 mm lens   | <b>Application Programming Interface</b> | Open API for software integration, including VAPIX® and AXIS Camera Application Platform from Axis Communications; specifications available at <a href="http://www.axis.com">www.axis.com</a><br>ONVIF, specifications at <a href="http://www.onvif.org">www.onvif.org</a><br>AXIS Video Hosting System (AVHS) with One-Click Camera connection  |
| <b>Image sensor</b>            | 1/4" progressive scan RGB CMOS   | <b>Intelligent video</b>                 | Video motion detection, active tampering alarm, AXIS Camera Application Platform   |
| <b>Lens</b>                    | M12 mount, fixed iris, megapixel resolution<br>AXIS M3113-R/M12: 2.9 mm, 66° view*, F2.0<br>AXIS M3114-R/M12: 2.9 mm, 80° view*, F2.0<br>AXIS M3114-R M12 2 mm: 1.97 mm, 105° view*, F3.0<br>*horizontal angle of view   | <b>Event triggers</b>                    | Intelligent video  |
| <b>Light sensitivity</b>       | AXIS M3113-R/M12, AXIS M3114-R/M12: 1 - 100000 lux, F2.0<br>AXIS M3114-R M12 2 mm: 1 - 100000 lux, F3.0  | <b>Event actions</b>                     | File upload: FTP, HTTP, network share and email; notification: email, HTTP and TCP; external output activation; video recording to edge storage; pre- and post-alarm video buffering   |
| <b>Shutter time</b>            | 1/24 500 s to 1/6 s  | <b>Data Streaming</b>                    | Event data   |
| <b>Camera angle adjustment</b> | Pan ± 30°, tilt 0-90°, rotation ± 180°   | <b>Built-in installation aids</b>        | Pixel counter  |
| Video                          |  | General                                  |  |
| <b>Video compression</b>       | H.264 (MPEG-4 Part 10/AVC)<br>Motion JPEG  | <b>Casing</b>                            | IP66-, IP67- and NEMA 4X-rated, IK08 impact-resistant aluminum and polycarbonate casing; dehumidifying membrane; captive screws; not designed for mounting outside a vehicle   |
| <b>Resolutions</b>             | AXIS M3113-R (all models): 800x600 to 160x90<br>AXIS M3114-R (all models): 1280x800* to 160x90<br>*1440x900 (1.3 MP) scaled resolution available via VAPIX®  | <b>Memory</b>                            | 128 MB RAM, 128 MB Flash   |
| <b>Frame rate</b>              | 30 fps in all resolutions  | <b>Power</b>                             | Power over Ethernet IEEE 802.3af Class 1, max. 3.2 W   |
| <b>Video streaming</b>         | Multiple, individually configurable streams in H.264 and Motion JPEG<br>Controllable frame rate and bandwidth<br>VBR/CBR H.264   | <b>Connectors</b>                        | AXIS M31-R: rugged, female RJ-45 10BASE-T/100BASE-TX<br>AXIS M31-R M12: rugged, female, D-coded M12 connector with rotatable coupling nut<br>All connectors support Power over Ethernet  |
| <b>Pan/Tilt/Zoom</b>           | Digital PTZ, preset positions, guard tour  | <b>Edge storage</b>                      | Support for recording to network share (Network Attached Storage or file server)   |
| <b>Image settings</b>          | Compression, color, brightness, sharpness, contrast, white balance, exposure control, exposure zones, backlight compensation, wide dynamic range – dynamic contrast, fine tuning of behavior at low light, mirroring of images<br>Rotation: 0°, 90°, 180°, 270°, including Corridor Format<br>Text and image overlay, privacy mask | <b>Operating conditions</b>              | -25 °C to 50 °C (-13 °F to 122 °F)<br>Humidity 15 - 100% RH (condensing)   |
| Network                        |  | <b>Approvals</b>                         | EN 55022 Class B, EN 60950-22, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, EN 55024, ICES-003 Class B, FCC Part 15 Subpart B Class B, VCCI Class B, ECE R10 rev.03 (E approval)<br>C-tick AS/NZS CISPR 22, EN 60950-1, EN 50121, IEC 60721-3-4 Class 4K3 (temperature range -25°C to 50°C)<br>EN 50155 Class T3 (vibration, shock, bump, temperature)<br>ISO 16750-3 (vibration), IEC 62262 Class IK08<br>IEC 60529 IP66/IP67, NEMA 250 Type 4X<br>AFNOR NF F16-101, E DIN 5510-2, UNI CEI 11170 |
| <b>Security</b>                | Password protection, IP address filtering, HTTPS** encryption, IEEE 802.1X network access control**, digest authentication, user access log  | <b>Weight</b>                            | 250 g (0.55 lb.)   |
| <b>Supported protocols</b>     | IPv4/v6, HTTP, HTTPS**, 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   | <b>Included accessories</b>              | Lens tool, top cover tool, drill hole template, mounting adapters, Installation Guide, Installation and Management Software CD, Windows decoder 1-user license   |

\*\*This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([www.openssl.org](http://www.openssl.org))

### Dimensions



### Camera connector variants

Rugged, female RJ-45 connector



Rugged, female, D-coded M12 connector with rotatable coupling nut

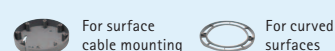


### Included accessories (see further details in the table above)

Lens and top cover tools



Mounting adapters



### Optional accessories

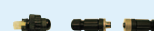
AXIS Q8108-R  
Network Video Recorder



M12 mount lenses  
(not applicable for  
AXIS M3114-R M12 2mm)



RJ-45/M12 connectors  
(compatible with camera  
connectors)



AXIS T8414  
Installation Display



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](http://www.axis.com/products/video/software)