AXIS 212 PTZ/212 PTZ-V Network Cameras

Full overview and instant zoom – without moving parts

AXIS COMMUNICATIONS

AXIS 212 PTZ/212 PTZ-V Network Cameras

A whole new definition of PTZ

AXIS 212 PTZ/212 PTZ-V are no ordinary PTZ cameras. They are the only PTZ network cameras that provide full overview, and instant, one-click pan/tilt/zoom – with maintained sharp image resolution. And it's all done without moving parts, so there's no wear and tear. In short, it's a whole new definition of PTZ.

FULL OVERVIEW >

A full 140° field of vision provides video of the entire monitored area. Conventional PTZ cameras can view only one part of the whole video scene at a time.

INSTANT PAN/TILT/ZOOM >

Zooming in from full overview to close-up is instant, in one-step clicks. There's no delayed reaction. Pan and tilt functions work in the same way.

NO MOVING PARTS >

AXIS 212 PTZ network cameras are unique in using a wide-angle lens and a 3 megapixel sensor to achieve PTZ functionality. No moving parts are needed, which means no wear and tear.

VANDAL-RESISTANT >

AXIS 212 PTZ-V has a vandal-resistant casing that provides effective protection against tampering as no part can be forcibly moved.

MAINTAINED RESOLUTION >

Many cameras cannot deliver an overview with sharp resolution, nor maintain resolution when zooming. AXIS 212 PTZ network cameras maintain sharp images at all times.

VIDEO SURVEILLANCE IN DEMANDING ENVIRONMENTS

AXIS 212 PTZ network cameras are perfect for indoor surveillance or premises up to 150 m^2 (500 sq ft), such as shops, reception areas, banks, server rooms and other places where you need to see the whole area and have the possibility to zoom in for detailed inspection and monitoring.
The AXIS 212 PTZ-V is a vandal-resistant network camera with metal base and durable cover providing excellent protection against vandalism – while offering the same superior camera performance as AXIS 212 PTZ.

The dotted lines show the limited area covered by conventional PTZ cameras. If the man on the left was shoplifting, he would be out of view. AXIS 212 PTZ network cameras let you view the entire monitored area. There are no hidden areas.

INSTANT PAN/TILT/ZOOM

The 3x zoom provides instant, one-click zoom functionality. Consequently, from the overview image, a security officer can zoom in 3 times on any suspicious behavior by just clicking on the part of the image where it's happening. No other PTZ camera can zoom in instantly on off-centered action. And since there is no movement in the lens system, the cameras instantly change the field of view. It's this simple:

> Overview of the whole scene in perfect image quality
> Pan, tilt and zoom with one click
> Follow a visitor with one click
> Return to overview with one click

When you zoom in on suspicious behavior, you increase your chances of being able to identify what is happening and who is involved.

NO MOVING PARTS

AXIS 212 PTZ network cameras achieve full overview as well as instant pan/tilt/zoom without moving parts, which means no wear and tear. This unique feature is based on two determining factors:

> A wide-angle lens combined with a 3 megapixel sensor
> Utilization of the full "windowing" possibilities: the cameras capture predetermined sections of the overview without mechanical motion.

The advantages of no moving parts are considerable:

> No wear and tear – and a level of durability and reliability far ahead of conventional PTZ.
> No noise – thus making the cameras even more discreet.
> No way to tell where the cameras are pointing. In fact, the cameras seems to follow anyone on the premises.
> No delay for mechanical movement – enabling instant pan/tilt/zoom, and thus no time lag in the images.

RESOLUTION – SHARP AND MAINTAINED

Many cameras cannot deliver an overview with sharp resolution, nor maintain resolution when zooming. AXIS 212 PTZ network cameras can, because they have such outstanding image resolution to start with.

OVERVIEW – THE STARTING POINT

By having a full overview of 140° (pan), AXIS 212 PTZ network cameras waste no pixels. This means that the full image sensor can be used for image quality purposes – and the difference is astonishing.

180/360° degree cameras cover a bigger area, but at the expense of spreading the amount of available pixels (resolution) over areas that are often of no interest. With the AXIS 212 PTZ network cameras, you see everything you need to see, and the image is sharper.

SUPERIOR IMAGE QUALITY

AXIS 212 PTZ/212 PTZ-V offer progressive scan and advanced signal processing based on a 3 megapixel CMOS sensor.

OVERSAMPLING

Oversampling is a technology that uses the advantages of a high-resolution sensor (2048x1536 pixels) in its full format. This means that, whether in full overview mode or when zooming in, full 1:1 VGA resolution of 640x480 pixels is maintained - resulting in a brighter image, more detail and higher contrast.

When you zoom in 3 times, you obtain normal VGA 1:1 resolution®

BANDWIDTH SAVER

Another obvious advantage of VGA resolution combined with enhanced image quality is lower requirements on bandwidth and storage capacity. AXIS 212 PTZ network cameras are able to efficiently "window" a specific portion of the 3 megapixel sensor grid. In doing so, the cameras filter out unnecessary information, which offloads your network and storage capacity, and lets you capture a well-defined "image concentrate".

ADVANCED SECURITY AND NETWORK MANAGEMENT

AXIS 212 PTZ network cameras offer the highest degree of security by using multiple, password-protected user access levels, IP address filtering, HTTPS encryption and IEEE 802.1X network access control. With the appropriate access rights, video from AXIS 212 PTZ network cameras can be accessed from any computer, anywhere, at any time.

IPv6 is supported in addition to IPv4, as insurance against the growing shortage of IP addresses, eliminating the need for network address translation and simplifying configuration in an IPv6-enabled network. Network utilization is optimized with the support for Quality of Service (QoS), which enables reservation of network capacity and prioritization of mission-critical surveillance in a QoS-aware network.

ADVANCED VIDEO AND EVENT MANAGEMENT

You can access live and recorded video at any time from any computer anywhere. AXIS 212 PTZ network cameras also allow for powerful event management with multi-window motion detection, audio detection and I/O (input/output) for connecting devices such as external relays and sensors to activate lights or open/close doors. The pre- and post-image alarm buffer further contributes to powerful event management, by securing images just before and after an alarm. AXIS 212 PTZ network cameras support AXIS Camera Station video management software, offering all the advanced capabilities you need: remote video monitoring, recording and playback.

AXIS 212 PTZ/212 PTZ-V include VAPIX®, Axis Communications' powerful Application Programming Interface (API), facilitating the development of customized applications. They also ensure that you benefit from the widest available range of third party applications, available via Axis Application Development Partners.

EASY INSTALLATION

AXIS 212 PTZ network cameras are optimized for wall mounting. An adapter is provided for angled mounting, so that when positioned at a specific angle, the camera can monitor a specific area along a wall or corridor, for instance.

ANGLE ADAPTER FOR LEFT AND RIGHT MOUNTING

The angled wall mount will help you optimize the direction of the tunnel vision so that no sensor space is wasted.

BUILT-IN POWER OVER ETHERNET

Built-in Power over Ethernet enables power to be delivered to AXIS 212 PTZ/212 PTZ-V via the network, consolidating power for higher reliability as well as further reducing cabling requirements and installation costs.

THE SECURITY BENEFITS

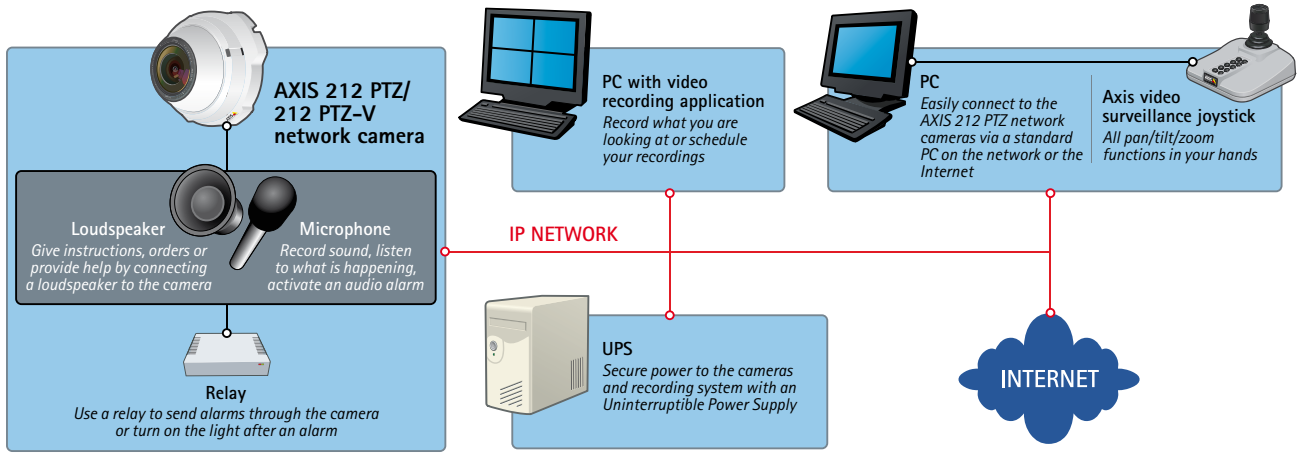
Market trends for cameras, particularly those for use within security applications, indicate a growing interest in PTZ network cameras, as network video has made it possible to easily manage cameras remotely with no extra cables. Built-in Power over Ethernet further contributes to this by enabling power to be delivered to AXIS 212 PTZ network cameras via the network, consolidating power for higher reliability as well as further reducing cabling requirements and installation costs.

The lack of moving parts contributes to operating reliability as well as resistance to tampering. Even though the camera does not need to move to capture a full field of view, it gives the impression of following anybody within its range. This can be a significant security factor, as people tend to act responsibly if they feel they're being watched.

Simultaneous MPEG-4 and Motion JPEG video streams for optimized quality and bandwidth usage together with pre- and post-alarm image buffering, video motion detection, scheduled and triggered event functionality with alarm notification provide effective indoor monitoring. The built-in two-way audio support enables remote users to not only view, but also listen in on an area and communicate orders or requests to visitors or intruders, thereby increasing the monitoring options.

In short, these compact and discreet cameras are ideal for indoor environments where you need an overview and the possibility to instantly pan, tilt and zoom for detailed inspections. Add open integration capacities, flexibility, scalability and the added security that comes with a reliable product from a reliable supplier, and you have the ideal solution for indoor video surveillance.

AXIS 212 PTZ/212 PTZ-V NETWORK CAMERAS: A TYPICAL INSTALLATION



TECHNICAL SPECIFICATIONS – AXIS 212 PTZ/212 PTZ-V NETWORK CAMERAS

Models	AXIS 212 PTZ: Tamper-resistant AXIS 212 PTZ-V: Vandal-resistant
Image sensor	1/2" progressive scan CMOS 3.1 Megapixel
Lens	Fujinon, F1. 8, fixed iris Focal length: 2.7 mm Focus range: 0.2 m to infinity (from front of lens)
Angle of view	44° - 140° horizontal 35° - 105° vertical
Zoom	3x, 0.1 s from wide to tele
Minimum illumination	10 Lux wide mode 20 Lux tele mode
Pan range	± 70° instant pan
Tilt range	± 52° instant tilt
Max speed	400°/second
Video compression	Motion JPEG MPEG-4 Part 2 (ISO/IEC 14496-2) with motion estimation Profiles: ASP and SP
Resolutions	9 resolutions from 640x480 to 160x120 via API 6 selections via configuration web page
Frame rate	Motion JPEG: Up to 30 fps in VGA MPEG-4: Up to 30 fps in VGA
Video streaming	Simultaneous Motion JPEG and MPEG-4 Controllable frame rate and bandwidth Constant and variable bit rate (MPEG-4)
Image settings	Compression levels: 100 Configurable color level, brightness, sharpness, white balance, exposure control, fine tuning of behavior at low light Overlay capabilities: time, date, text
Pan/tilt/zoom	20 preset positions Guard Tour Sequence mode Supports Windows compatible joysticks Designed for continuous movement
Shutter time	1/5 s to 1/10000 s
Audio	Half-duplex or simplex Built-in microphone, external microphone input or line input Mono audio output (line level) connects to PA system or active speaker with built-in amplifier Audio compression: AAC LC 8-32 kbit/s, G.711 PCM 64 kbit/s, G.726 ADPCM 32 or 24 kbit/s
Security	Multiple user access levels with password protection IP address filtering, HTTPS encryption IEEE 802.1X network access control
Users	20 simultaneous users Unlimited number of users using multicast (MPEG-4)
Alarm and event management	Events triggered by video motion detection, audio detection, external input or according to a schedule Image upload over FTP, email and HTTP Notification over TCP, email, HTTP and external output 9 MB of pre- and post alarm buffer (approx 5 min of 320x240 resolution video at 4 frames per sec)
Connectors	RJ-45 for Ethernet 10BaseT/100BaseTX Mini DC power jack Terminal block for 1 alarm input and 1 output 3.5 mm jack for Mic in (max 80 mVpp) or Line mono input (max 6.4 Vpp), 3.5 mm jack for Line mono output (max 1.3 Vpp) to active speaker

Casing	AXIS 212 PTZ: Polycarbonate base AXIS 212 PTZ-V: 1000 kg (2200 lbs) impact-resistant casing with metal base and rugged polycarbonate transparent cover Tamper-resistant
Processors and memory	CPU, video processing and compression: ARTPEC-A RAM: 32 MB Flash: 8 MB Real-time clock with battery back-up
Power	4.9 - 5.1 V DC max 3.6 W Power over Ethernet (IEEE 802.3af) Class 1
Operating conditions	5 - 40 °C (41 - 104 °F) Humidity 20 - 80% RH (non-condensing)
Installation, management and maintenance	AXIS Camera Management tool on CD and web-based configuration Configuration of backup and restore Firmware upgrades over HTTP or FTP, firmware available at www.axis.com
Video access from web browser	Camera live view Video recording to file (ASF) Sequence tour for up to 20 PTZ presets or Axis video sources Customizable HTML pages
Minimum web browsing requirements	Pentium III CPU 500 MHz or higher, or equivalent AMD 128 MB RAM DirectX 9 compatible graphics board, Direct Draw Windows XP, 2000 Internet Explorer 6.x or later For other operating systems and browsers see www.axis.com/techsup
System integration support	Open API for software integration, including VAPIX® from Axis Communications*, AXIS Media Control SDK*, event trigger data in video stream Quality of Service (QoS) Layer 3, DiffServ Model Embedded Linux operating system ** Available at www.axis.com*
Supported protocols	IPv4/v6, TCP, ICMP, ARP, RTSP, RTP, RTCP, UDP, IGMP, DHCP, DNS, DynDNS, SOCKS, NTP, UPnP, Bonjour, HTTP, HTTPS, SSL/TLS*, SNMPv1/v2c/v3 (MIB-II), SMTP, FTP, QoS, IEEE 802.1X More information on protocol usage available at www.axis.com ** This product includes software developed by the Open SSL Project for use in the Open SSL Tool kit (www.openssl.org)*
Accessories (included)	Installation Guide, CD with installation tools, recording software and User's Manual, mounting and connector kits, angled wall mount, power supply PS-H 5.1 V DC, licenses for 1 encoder and 1 decoder, decoder software for Windows
Video management software (not incl.)	AXIS Camera Station - Video management software for viewing, recording and archiving up to 25 cameras See www.axis.com/partner/adp_partners.htm for more software applications via partners
Accessories (not incl.)	AXIS 295 Video Surveillance Joystick Multi-user decoder license pack Vertical tilt adapter
Approvals	EN55022 Class B, EN55024, N61000-3-2, EN61000-3-3, FCC Part 15 Subpart B Class BVCCI Class B, ICES-003 Class B, C-tick AS/NZS CISPR 22, EN60950 Power supply: UL, CSA
Dimensions (H x W x D) and weight	78 x 144 x 132 mm (3.0" x 5.6" x 5.2") AXIS 212 PTZ: 504 g (1.1 lbs) AXIS 212 PTZ-V: 660 g (1.5 lbs)

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