AXIS 212 PTZ Network Camera

Full overview and instant zoom – yet no moving parts

AXIS COMMUNICATIONS

AXIS 212 PTZ Network Camera

A whole new definition of PTZ

AXIS 212 PTZ is no ordinary PTZ. It's the only PTZ network camera that provides 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.

These distinguishing features make a unique combination:

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 work in the same instant way.

NO MOVING PARTS >

AXIS 212 PTZ is also 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.

MAINTAINED RESOLUTION >

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

PERFECT FOR INDOOR VIDEO SURVEILLANCE >

AXIS 212 PTZ is perfect for indoor surveillance of premises up to 150 m^2/500ft^2, 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. Add powerful event management functionalities such as pre- and post-alarm image buffering, and you have a highly efficient video surveillance solution.

AXIS 212 PTZ also incorporates a number of other features that it shares with many other Axis network cameras: BUILT-IN POWER OVER ETHERNET, SIMULTANEOUS MOTION JPEG AND MPEG-4, TWO-WAY AUDIO, COMPREHENSIVE SET OF NETWORK SECURITY FEATURES, TAMPER-RESISTANT DESIGN, POWERFUL API, AND MORE.

FULL OVERVIEW

Conventional PTZ cameras allow the user to pan, tilt and zoom, but not to see the whole video scene – just one portion at a time. AXIS 212 PTZ gives the user the whole picture, then allows instant pan/tilt/zoom to get the details.

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 lets you view the entire monitored area. There are no hidden areas.

INSTANT PAN/TILT/ZOOM

The 3x zoom provides instant, one-click optical 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 camera instantly changes 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

Whether in overview or fully zoomed in, you get perfect image quality in VGA resolution. Zooming – the instant, one-click, 3x zoom – does not decrease the image quality. Edges do not become jagged. More importantly, 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 achieves full overview as well as instant pan/tilt/zoom without any 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 camera captures 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 camera even more discreet.
- > No way to tell where the camera is looking. In fact, the camera 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 can, because it has such outstanding image resolution to start with.

OVERVIEW – THE STARTING POINT

By having a full overview of 140° (pan), AXIS 212 PTZ wastes 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, you see everything you need to see, and the image is sharper.

SUPERIOR IMAGE QUALITY

AXIS 212 PTZ offers 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 is able to efficiently "window" a specific portion of the 3 megapixel sensor grid. In doing so, the camera filters out unnecessary information that offloads your network and storage capacity, and lets you capture a well-defined "image concentrate".

ADVANCED SECURITY AND NETWORK MANAGEMENT

AXIS 212 PTZ offers 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 can be accessed from any computer, anywhere, at any time.

Support for IPv4 and IPv6 ensures that the camera can operate on existing and future networks. IPv6, the successor to IPv4, increases the number of available addresses eliminating the need for network address translation and simplifying configuration. 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 supports AXIS Camera Station video management software, offering all the advanced capabilities you need: remote video monitoring, recording and playback. It also lets you perform scheduled event management, using its embedded features: video motion detection, audio detection, inputs/output for connecting additional devices such as external relays and sensors to activate light 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 includes the Axis Application Programming Interface, AXIS VAPIX™ API, facilitating the development of customized applications. It also ensures you benefit from the widest available range of third party applications, available via Axis Application Development Partners.

EASY INSTALLATION

AXIS 212 PTZ is optimized for wall mounting, but may also be mounted on the ceiling. 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 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.

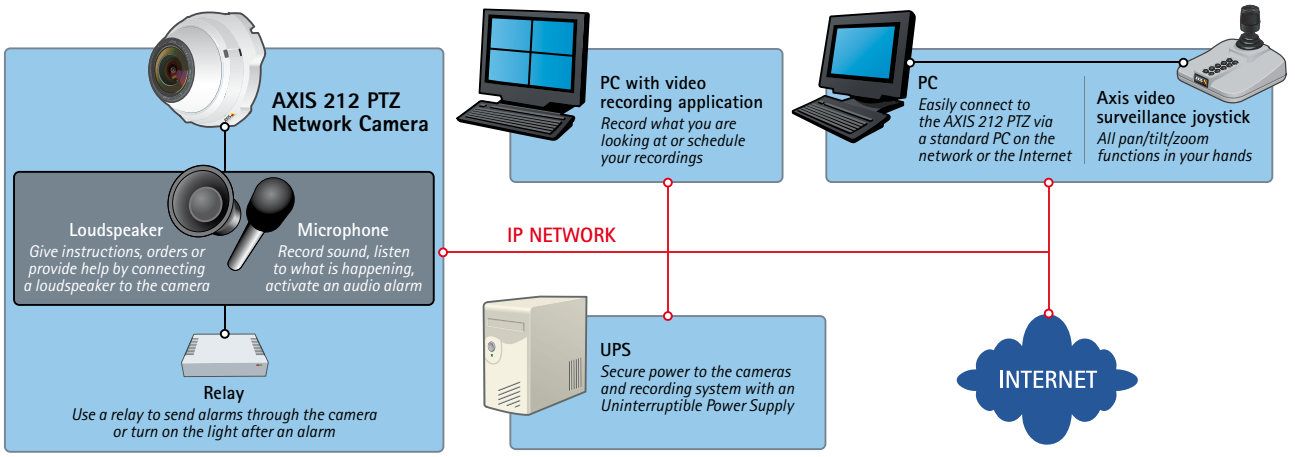
Built-in Power over Ethernet further contributes to this by enabling power to be delivered to AXIS 212 PTZ via the network, consolidating power for higher reliability as well as further reducing cabling requirements and installation costs.

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, this compact and discreet camera is 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 NETWORK CAMERA: A TYPICAL INSTALLATION



TECHNICAL SPECIFICATIONS – AXIS 212 PTZ NETWORK CAMERA

Image sensor	3.1 Megapixel 1/2" progressive scan CMOS
Lens	Fujinon, F1. 8, fixed iris Focal length: 2.7 mm Focus range: 0.2 m - infinity (from front of lens)
Angle of view	Horizontal: 44° - 140° Vertical: 35° - 105°
Zoom	3x, 0.1 sec from wide to tele
Min 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: Advanced Simple Profile and Simple Profile
Resolutions	9 resolutions from 640x480 to 160x120 via API 6 selections via configuration Web page
Frame rate	Up to 30 frames per second in VGA (Motion JPEG and MPEG-4)
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 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 or external microphone/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 built-in multi-window motion detection, audio detection, external inputs or according to a schedule Image upload over FTP, email and HTTP Notification over TCP, email, HTTP and external output Pre- and post alarm buffer of 9 MB (approx 5 min of 320x240 resolution video at 4 frames per sec)
Connectors	Ethernet 10BaseT/100BaseTX, RJ-45 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	Polycarbonate, tamper-resistant
Processors and memory	CPU, video processing and compression: ARTPEC-A RAM: 32 MB, Flash: 8 MB Battery backed-up real-time clock
Power	4.9 - 5.1 V DC max 3.6 W, or Power over Ethernet (IEEE 802.3af) Class 1 (max 3.84 W)
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 capability for up to 20 PTZ presets or external Axis video sources Customizable HTML pages
Minimum web browsing requirements	Pentium III CPU 500 MHz or higher, or equivalent AMD 128 MB RAM AGP graphic card 32 MB RAM, Direct Draw Windows XP or 2000, DirectX 9.0 or later 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 AXIS VAPIX API*, 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 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)*
Included accessories	Installation Guide CD with installation and management tools, demo software and User's Manual Mounting and connector kits, angled wall mount Power supply PS-H 5.1 V DC MPEG-4 decoder (Windows) MPEG-4/AAC licenses (1 encoder, 1 decoder)
Video management software (not incl.)	AXIS Camera Station - Surveillance application 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 MPEG-4/AAC decoder multi-user license pack
Approvals	EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, FCC Part 15 Subpart B Class B, VCCI Class B, ICES-003 Class B, C-tick AS/NZS CISPR 22, EN60950 Power supply: UL, CSA
Dimensions (HxWxD) and weight	78 x 144 x 132 mm (3.0" x 5.6" x 5.2") Weight: 504 g (1.1 lbs)

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