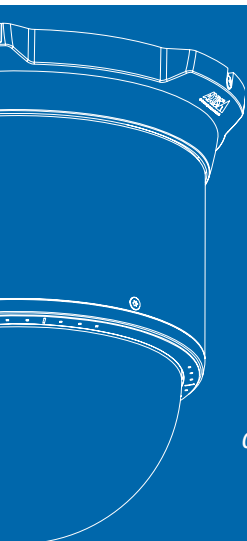


# AXIS 233D Network Dome Camera

*High-speed dome camera with progressive scan and 35x zoom*



*AXIS 233D Network Dome Camera provides exceptional features such as progressive scan, 35x optical zoom, and fast and precise pan/tilt mechanics, for superb performance and image quality. AXIS 233D is designed for use in demanding security installations such as airports, casinos, stadiums and ports.*



## **35x ZOOM** >

35x optical and 12x digital zoom provides powerful zoom capabilities to enable monitoring of distant objects in sharp detail.

## **AREA ZOOM** >

AXIS 233D, with its unique area zoom feature, enables immediate zoom to any desired part of a scene.

## **PROGRESSIVE SCAN** >

Progressive scan provides full resolution images of moving objects, without distortion.

## **ELECTRONIC IMAGE STABILIZER** >

The Electronic Image Stabilizer (EIS) reduces the effect of vibrations caused by traffic or wind, giving sharper images.

## **WIDE DYNAMIC RANGE** >

With 128x Wide Dynamic Range (WDR), AXIS 233D ensures high-quality video even in complex lighting conditions.

## **PAN/TILT PERFORMANCE** >

High precision, low speed movement of 0.05°/second makes it possible to follow an object from a long distance. Maximum speed 450°/second allows for extremely fast pan and tilt.

## FOR DEMANDING SECURITY INSTALLATIONS

AXIS 233D is a network dome camera for demanding security installations. Its wide range of features including progressive scan, 35x zoom, fast and precise pan/tilt mechanics and wide dynamic range ensure superb performance and superior image quality. AXIS 233D is designed for use in challenging surveillance applications – such as airports, stadiums, casinos and ports – where the ability to follow moving objects from a long distance and see great detail is crucial.

## POWERFUL 35X ZOOM

With the powerful 35x optical and 12x digital zoom, AXIS 233D can zoom in on small and distant objects, allowing for example license plates to be clearly identified from a distance of 160 m (525 ft). Whether zoomed out or in full 35x zoom position, images are crisp, clear, and rich in color and detail.



## AREA ZOOM

AXIS 233D can simply and quickly pan, tilt and zoom to any desired part of a monitored scene. Mark an area and AXIS 233D will immediately zoom in to show a detailed view of that area.

## SUPERIOR IMAGE QUALITY

### PROGRESSIVE SCAN

With traditional interlaced scanning NTSC/PAL techniques, every image consists of two frames that are captured after each other and merged together. This results in degraded quality when freezing the image in recorded video. AXIS 233D instead uses progressive scan, capturing the full image at the same moment, which provides non-distorted, superior quality images with drastically reduced motion blur.

## ELECTRONIC IMAGE STABILIZER (EIS)

Electronic image stabilizer (EIS) reduces the effect of vibration caused by traffic or wind, giving sharper images. This feature is especially useful when AXIS 233D is installed in places subject to shaking or vibration, such as on a pole or close to a highway with heavy traffic.



AXIS 233D



Conventional camera

## WIDE DYNAMIC RANGE (WDR)

AXIS 233D has 128x wide dynamic range, maintaining contrast to ensure high-quality video and detailed images even in very complex lighting conditions, such as bright sun, sharp backlight or shaded areas.



AXIS 233D



Conventional camera

## SIMULTANEOUS MPEG-4 AND MOTION JPEG

AXIS 233D offers simultaneous MPEG-4 and Motion JPEG. Video streams can be optimized for image quality and bandwidth efficiency by configuration of frame rate, resolution, compression level and format – offering up to 30 frames per second in 4CIF resolution in all compressions.

## EXCEPTIONAL PAN/TILT PERFORMANCE

With a maximum speed of 450°/second, and high precision low speed movement at 0.05°/second, AXIS 233D can follow a walking person at a distance of 400 m (1300 ft) and pan/tilt to any preset in less than 1.5 seconds. The freeze function holds the image while moving between presets, to make it easier to work with. The E-flip functionality electronically inverts the image 180° when following an object moving under the dome.

## TWO-WAY AUDIO SUPPORT

With the ability to connect to external speakers and microphones, AXIS 233D enables remote users not only to view, but also listen in on an area and communicate orders or requests to visitors or intruders.

## ADVANCED SECURITY AND NETWORK MANAGEMENT

AXIS 233D is supported by AXIS Camera Management, which offers centralized management of AXIS 233D and other Axis network video devices. It locates and shows connection status, sets IP addresses, configures single or multiple units and manages firmware upgrades and user access rights. AXIS 233D Network Dome Camera offers a comprehensive set of network security features, such as IP address filtering, HTTPS encryption and IEEE 802.1X authentication.

AXIS 233D supports Quality of Service (QoS), which enables reservation of network capacity and prioritization of mission-critical surveillance in a QoS-aware network. Support for IPv6 is included in addition to the standard IP protocol version 4, as insurance against the growing shortage of IPv4 addresses.



## POWERFUL VIDEO AND EVENT MANAGEMENT

With Axis network cameras, video can be accessed at any time, from any computer anywhere. AXIS 233D allows for powerful event management with multi-window motion detection, and inputs/outputs for connecting e.g. sensors and external relays for activating lights, locking/unlocking doors, etc. Pre- and post-image alarm buffering secures images just before and after an alarm.

## OPEN PROGRAMMING INTERFACE FOR CUSTOMIZED APPLICATIONS

AXIS 233D includes the industry-standard Axis Application Programming Interface, AXIS VAPIX™ API, which facilitates the development of customized software solutions. It also ensures compatibility with the market's widest range of third-party applications, available via Axis Application Development Partners.



### ALL INCLUSIVE

*AXIS 233D comes complete with power supply and indoor mounting accessories for hard and drop ceiling. No additional equipment is needed. Both smoked and clear transparent covers are provided.*

### EASY JOYSTICK CONTROL OF AXIS 233D

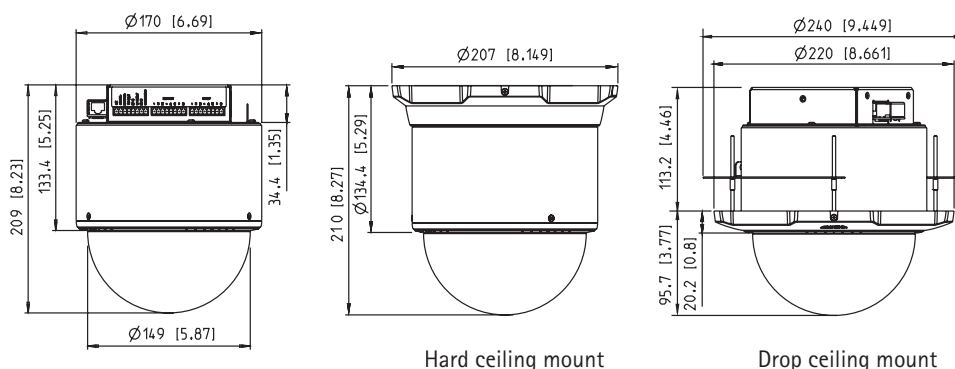


*Optional accessory*

*The highly responsive and extremely precise AXIS 295 Video Surveillance Joystick allows easy tracking of objects of interest and fast, flexible and secure operation of AXIS 233D. The joystick offers 12 programmable push buttons and a USB interface that makes installation easy. With the joystick connected, fast and accurate pan/tilt/zoom control is enabled.*

## DIMENSIONS

Measurements in mm (inches)



Included accessories:

- Indoor power supply AXIS PS-R 24 V DC
- Drop ceiling and hard ceiling mounts
- Clear and smoked transparent covers
- CD with installation tools including AXIS Camera Management.

**TECHNICAL SPECIFICATIONS – AXIS 233D NETWORK DOME CAMERA**

29219/EN/R5/0704

<b>Models</b>	AXIS 233D Network Dome Camera 60 Hz AXIS 233D Network Dome Camera 50 Hz
<b>Image sensor</b>	1/4" ExView HAD Progressive Scan CCD
<b>Lens</b>	F1.4 - 4.2 f = 3.4 - 119 mm Automatic day/night IR filter Auto focus Focus range: 100 mm (wide) or 1000 mm (tele) to infinity
<b>Angle of view</b>	1.73° - 55.8° Horizontal
<b>Zoom</b>	35x optical and 12x digital, total 420x
<b>Minimum illumination</b>	Color: 0.5 lux at 30 IRE, B/W: 0.008 lux at 30IRE
<b>Pan range</b>	360° endless
<b>Tilt range</b>	180°
<b>Speed range</b>	Pan: 0.05 - 450°/sec, Tilt: 0.05 - 450°/sec
<b>Video compression</b>	Motion JPEG MPEG-4 Part 2 (ISO/IEC 14496-2) ASP level 0-5, SP level 0-3
<b>Resolutions</b>	4CIF, 2CIFExp, 2CIF, CIF, QCIF Max 704x480 (NTSC) 704x576 (PAL) Min 176x120 (NTSC) 176x144 (PAL)
<b>Frame rate NTSC/PAL</b>	Up to 30/25 fps progressive scan video in all resolutions (Motion JPEG or MPEG-4)
<b>Video streaming</b>	Simultaneous Motion JPEG and MPEG-4 Controllable frame rate and bandwidth Constant and variable bit rate (MPEG-4)
<b>Image settings</b>	Wide Dynamic Range (WDR) Electronic Image Stabilization (EIS) Manual shutter time setting Compression levels: 11 (Motion JPEG)/23 (MPEG-4) Rotation: 0°, 180° Aspect ratio correction Color: color level, black & white Configurable Brightness and Sharpness Overlay capabilities: Zone ID, preset ID, time, date, PTZ coordinates, text or image 3D privacy masking with 8 zones
<b>Pan/tilt/zoom</b>	E-flip, 100 preset positions, Guard tour, Control queue Supports Windows compatible joysticks
<b>Shutter time</b>	NTSC: 0.5 - 1/30 000 s, PAL: 1.5 - 1/30 000 s
<b>Audio</b>	Two-way (full or half duplex) or one-way G.711 PCM 64kbit/s, G.726 ADPCM 32 or 24 kbit/s Requires external microphone or line in. Mono audio output (line level) connects to PA system or active speaker with built-in amplifier
<b>Security</b>	Multiple user access levels with password protection, IP address filtering and HTTPS encryption, IEEE 802.1X network access control
<b>Users</b>	20 simultaneous unicast users Unlimited users using multicast (MPEG-4)
<b>Alarm and event management</b>	Events triggered by built-in motion detection, PTZ position, audio detection, external inputs, temperature levels or according to a schedule. Image upload over FTP, e-mail and HTTP Notification over TCP, e-mail, HTTP and external outputs. Pre- and post alarm buffer of up to 36 MB
<b>Connectors</b>	Ethernet 10BaseT/100BaseTX, RJ-45 Three 8-pin terminal blocks: 4 alarm inputs 3.3 - 40 VDC, 4 relay outputs 50 V 500 mA, power-in, audio line/mic in, audio line out, auxiliary power out, 12 VDC max 200 mA

<b>Casing</b>	Metal/Plastic casing. Polycarbonate dome cover.
<b>Processors, memory and clock</b>	AXIS ETRAX FS 32-bit RISC CPU, AXIS ARTPEC-2 video compression chip + 8MB RAM, 64 MB RAM, 8 MB flash Battery backed up real-time clock
<b>Power</b>	18 - 30 VAC, Max 25VA 22 - 40 VDC, Max 20W
<b>Operating conditions</b>	-5 - 45 °C (23 - 113 °F) Humidity 20 - 80% RH (non-condensing) Alarm when out of operating range
<b>Installation, management and maintenance</b>	Installation tool on CD and Web-based configuration Configuration backup and restore AXIS Camera Station One for recording AXIS Camera Management for camera management
<b>Video access from web browser</b>	Camera live view for up to 20 clients, video recording to file (ASF), sequence tour for up to 20 Axis video sources, customizable HTML pages
<b>Minimum web browsing requirements</b>	Pentium III CPU 500 MHz or higher, or equivalent AMD, 128 MB RAM, AGP graphics card 32 MB RAM Direct Draw Windows XP, 2000, DirectX 9.0 or later Internet Explorer 6.x or later
<b>System integration support</b>	Open API for application integration, including AXIS VAPIX API*, AXIS Media Control SDK*, event trigger data in video stream Quality of Service (QoS) Layer 3, DiffServ Model Watchdog ensures continuous operation, event notifications can be monitored by other systems Embedded Linux operating system
<b>Supported protocols</b>	Pv4/v6, HTTP, HTTPS, SSL/TLS*, TCP, QoS, SNMPv1/v2c/v3 (MIB-II), RTSP, RTP, UDP, IGMP, RTCP, SMTP, FTP, ICMP DHCP, UPnP, Bonjour, ARP, DNS, DynDNS, SOCKS.  <i>*This product includes software developed by the Open SSL Project for use in the Open SSL Tool kit (<a href="http://www.openssl.org">www.openssl.org</a>)</i>
<b>Accessories (included)</b>	Indoor power supply AXIS PS-R 24 VDC, drop ceiling and hard ceiling mounting brackets, clear and smoked dome covers, Installation Guide, CD with User's Manual, installation and management tool, MPEG-4 licenses (1 encoder, 1 decoder), MPEG-4 decoder (Windows)
<b>Video management software (not incl.)</b>	AXIS Camera Station - Surveillance application for viewing, recording and archiving up to 25 cameras
<b>Accessories (not incl.)</b>	Outdoor housing solutions Indoor ceiling drop pole mount Outdoor power supply, IR illuminators AXIS 295 Video Surveillance Joystick MPEG-4 Decoder multi-user license pack
<b>Approvals</b>	EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, EN61000-6-1, EN61000-6-2, FCC Part 15 Subpart B Class B, VCCI Class B, C-tick AS/NZS 3548, ICES-003 Class B Safety: EN60950-1 (IEC 60950-1) with Axis PS-R (indoor power supply) and Axis PS24 outdoor power supply PS-R power supply: PSE, TUV/GS, cUL, CE, CB, SAC
<b>Dimensions (HxWxD) and weight</b>	170 x 170 x 209 mm (6.69" x 6.69" x 8.23") 2.5 kg (5.5 lbs) including hard ceiling mount excluding power supply