AUTODOME IP 7000 HD

www.boschsecurity.com

BOSCH
Invented for life

- High-resolution, full HD PTZ camera with 1080p25/30 (2MP) resolution and 20x zoom
- Intelligent Tracking and alarm rules engine with on-board Intelligent Video Analytics (IVA)
- Enhanced system flexibility with dual recording options (iSCSI, SD card) and dual power source options (High Power over Ethernet (High PoE) / 24 VAC)
- Fully configurable quad streaming with individually configurable HD streams, based on Bosch's Common Product Platform (CPP4)
- Easy and intuitive installation with multiple pre-configured user modes that allow users to select the camera configuration that is ideal for their applications

The AUTODOME 7000 HD is an easy to install, high-speed PTZ dome camera, in a field-proven indoor/outdoor pendant housing or indoor in-ceiling housing, that delivers unmatched picture quality and network performance day and night with superb high-definition (HD) 1080p25/30 (2MP) video and 20x optical zoom. The camera provides complete network-based control of all dome functionality including pan/tilt/zoom operation, presets, tours and alarms as well as web-based configuration of all dome settings. It also provides direct network video streaming using H.264 compression / bandwidth throttling to efficiently manage bandwidth and storage requirements while delivering outstanding image quality.

Functions

High-performance PTZ day/night camera
The camera has a large, effective sensor area that contributes to very high camera sensitivity. The camera can be configured to operate in 720p50/60 mode for capturing fast motion (for example, in traffic or gaming scenarios). The default 1080p25/30 mode delivers high resolution images with six times more details than a standard definition (SD) camera.

Intelligent Defog
Users can configure the mode to activate automatically when the global contrast enhancement method in the camera detects fog and adds light to the video image (and then deactivates when the fog clears or the scene changes).

Sodium vapor lamp white balance
The camera is an exceptional performer when capturing video under a sodium vapor lamp (a street lamp or tunnel lamp, for example). Uncorrected images under these conditions have a yellowish tint, which can make identification difficult. In the Sodium Vapor White Balance mode, the camera automatically compensates for the light from a sodium vapor lamp to restore objects to their original color.

Virtual masking
The camera offers Virtual Masking, which gives users flexibility to mask parts of the scene which should not be considered for flow analysis to trigger Intelligent Tracking. This allows users to mask from IVA/Tracking any background motion (moving trees, pulsating lights, and busy roads) in the scene without blocking the motion from the video.

Intelligent Tracking
The camera utilizes the built-in Intelligent Video Analytics (IVA) to follow an individual or an object continuously. Objects detected by IVA when the camera is in a stationary position activate the Intelligent Tracking feature, which controls the pan/tilt/zoom actions of the camera to keep the tracked object in the scene.
The new Intelligent Tracking is based on robust flow detection algorithms which can reliably track moving objects even under challenging scenes.
The tracking and detection reliability can be enhanced further with virtual masking for scenes with a lot of background motion such as trees or other objects creating constant motion in the scene.
The camera supports three modes for Intelligent Tracking:
Auto mode: When configured in this mode, the camera actively analyzes the video to detect any moving object. If it detects movement, it begins to track the object. This mode is most useful for scenarios where normally no motion is expected.
One Click mode: In this mode, users can click an object moving in the live video image to enable the camera to track the movement of the selected object. This mode is most useful for scenarios where normal scene activity is expected.
IVA-triggered mode: In this mode, the camera continuously analyzes the scene for IVA alarms or IVA rule violations. If an IVA rule is violated, it triggers the advanced tracking feature of the camera to start following the object / person that triggered the alarm.
This unique combination of robust IVA and Intelligent Tracking allows the camera to track moving objects of interest without getting distracted by other moving objects in the scene.

Intelligence
With built-in video content analysis, the AUTODOME reinforces the Intelligence-at-the-Edge concept where edge devices become increasingly intelligent.
The AUTODOME comes with Bosch's Intelligent Video Analysis (IVA) built-in. IVA is state-of-the-art intelligent video analysis that reliably detects, and analyzes moving objects while suppressing unwanted alarms from spurious sources in the image.
The IVA functionality built into the AUTODOME is able to detect idle and removed objects as well as loitering, multiple line crossing, and trajectories. IVA also supports BEV (Bird's Eye View) People counting.
Assisted Self Calibration and configurable detection filters improve reliability and reduce operator work load.

PTZ drive and mechanism
The AUTODOME 7000 supports 256 pre-positions and two styles of Guard Tours: Preset and Record/Playback. Users can configure the preset standard tour with as many as 256 sequential pre-positions, with a configurable dwell time between pre-positions. The AUTODOME Series also provides support for two recorded tours, which are recorded macros of an operator's movements, including pan, tilt, and zoom activities, and can be played back with the click of a button.
Pan and tilt preset repeatability are accurate to within ±0.1 degrees to ensure that the correct scene is captured every time. The camera delivers variable pan/tilt speeds from a crawl speed of only 0.1 degrees per second to a full 400 degrees per second. The camera is capable of pan speeds of 400 degrees per second and tilt speeds of 300 degrees per second between prepositions. The camera provides a tilt angle 18 degrees above the horizon, and a pan range of up to 360 degrees continuous rotation.

Five (5) pre-programmed user modes
Five pre-programmed but configurable user modes, optimized with the best settings for a variety of typical applications, make camera programming on-site easy and user-friendly. Users select from the menu the mode that best defines the environment in which the camera is installed:
- Outdoor – general day-to-night changes with sun highlights and street lighting
- Indoor – general day-to-night changes without sun highlights and street lighting
- Low light –optimized for sufficient details at low light
- Motion – monitoring traffic or fast moving objects; motion artifacts are minimized
- Vibrant – enhanced contrast color reproduction and sharpness

Users have the ability to customize these modes, if necessary, for the specific requirements of the site.

Superior privacy masking
The camera provides 24 individual, easy to configure privacy masks, with up to 8 displayed in the same scene. As the camera is zoomed, each mask changes size smoothly and quickly, ensuring that the covered object cannot be seen in most cases.

Comprehensive streaming capabilities on Bosch's Common Product Platform (CPP4)
The camera has an advanced, efficient H.264 encoder (CPP4) embedded for high quality HD streaming video and very efficient streaming and network capabilities. The new platform supports simultaneous streaming of individually configurable HD streams, and allows a choice of HD resolution in combination of SD resolutions.

Recording and storage management
A memory card (SD (Secure Digital), SDHC (Secure Digital High Capacity), or SDXC (Secure Digital eXtended Capacity)) can be used for local alarm recording or for scheduled local recording to improve the overall recording reliability. Recording management can be controlled by the Bosch Video Recording Manager (VRM), or the camera can use iSCSI targets directly without any recording software.

Dual power options
All models can be powered by a High Power-over-Ethernet (Bosch High PoE)-compliant network using a Bosch High PoE Midspan (sold separately) over a single network cable and/or a 24VAC power supply. Certain models can also be powered by any PoE+ Power Sourcing Equipment (PSE; midspan or switch) that is compliant to the IEEE 802.3at, class 4 standard and/or a 24 VAC power supply.
When powered using High PoE or PoE+ (IEEE 802.3at class 4) configuration, only a single cable connection is required to power and to control the camera while also viewing images from the camera. For additional system reliability, users also have the option to connect the 24 VAC power supply to the camera while using High PoE.

Video management system support
The camera ships with Bosch Video Client (BVC), an easy-to-use software from Bosch that is suitable for midsize installations. For large enterprise systems, AUTODOME cameras can be used with Bosch Video Management System (BVMS), which allows enhanced video management and viewing capabilities.
In addition, the camera is supported/integrated into all of the leading third party video management systems.

ONVIF conformant
The AUTODOME Series conforms to the ONVIF Profile S specification allowing easy integration with the conformant devices and VMS.
For more information about ONVIF, visit www.onvif.org.
The camera conforms to the ONVIF (Open Network Video Interface Forum) specification which guarantees interoperability between network video products regardless of manufacturer. ONVIF conformant devices are able to exchange live video, audio, metadata and control information. They are automatically discovered and connected to network applications such as video management systems.

Fiber Optic Kit
Bosch offers the optional VG4-SFPSCKT, a unique media converter module for use with various Bosch devices. This media converter module is designed to accept a wide-range of 10/100 Mbps SFP modules for use with Multimode or Single-mode optical fiber with LC or SC connectors.
The media converter module along with the SFP module is user-installed directly into the camera‘s power supply box to provide an integrated fiber optic solution.

Access Security
Password protection with three levels and 802.1x authentication is supported. To secure Web browser access, use HTTPS with a SSL certificate stored in the camera.

Easy upgrade
Remotely upgrade the camera whenever new firmware becomes available. This ensures up-to-date products, thus protecting investment with little effort.

Ease of installation and servicing
The camera has been designed for quick and easy installation; a key feature from Bosch CCTV products. All housings feature recessed screws and latches for increased tamper resistance.
Indoor/outdoor pendant housings are rated to provide IP66 protection and offer an operating temperature range down to -40 °C (-40 °F). The indoor/outdoor pendant comes fully assembled with a sunshield and ready for wall or pipe applications with the proper mounting hardware (sold separately). In addition, the camera models with both pendant and in-ceiling housing come equipped with a low-impact, high-resolution acrylic bubble for enhanced image clarity. You can easily convert the outdoor pendant for indoor applications by removing the sunshield.
Bosch offers a full complement of hardware and accessories (sold separately) for wall, corner, mast, roof, pipe mount, and in-ceiling applications for indoor and outdoor environments, which allow the camera to be adapted easily to individual site requirements.

Advanced networking capabilities
The AUTODOME offers advanced capabilities so you can configure the camera to take advantage of the latest networking technology.
The AUTODOME offers Quality of Service (QoS) configuration options to ensure fast network response to PTZ data and images. Quality of Service (QoS) is the set of techniques to manage network resources. QoS manages the delay, delay variation (jitter), bandwidth, and packet loss parameters to guarantee the ability of a network to deliver predictable results. QoS identifies the type of data in a data packet and divides the packets into traffic classes that can be prioritized for forwarding.
The AUTODOME also supports the IPv6 internet-layer protocol for packet-switched internetworking across multiple IP networks. IPv6 uses 128-bit addresses (IPv4 uses 32-bit addressing), which allows for many more devices and users on the internet as well as extra flexibility in allocating addresses and efficiency for routing traffic.

Certifications and approvals

HD standards

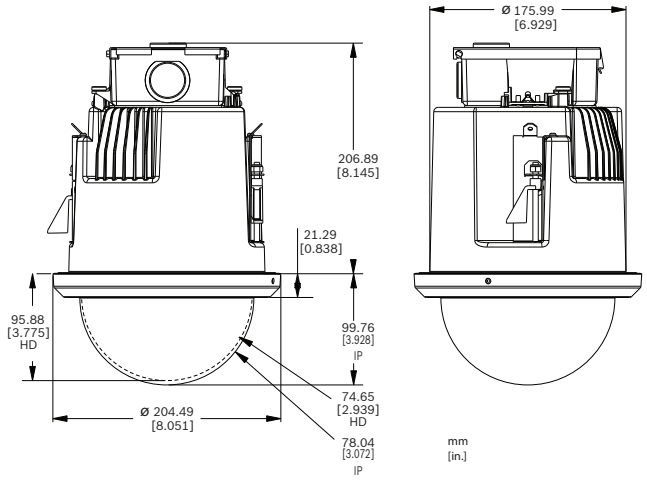
- Complies with the SMPTE 274M-2008 Standard in:
  - Resolution: 1920x1080
  - Scan: Progressive
  - Color representation: complies with ITU-R BT.709
  - Aspect ratio: 16:9
  - Frame rate: 25 and 30 frames/s
- Complies with the 296M-2001 Standard in:
  - Resolution: 1280x720
  - Scan: Progressive
  - Color representation: complies with ITU-R BT.709
  - Aspect ratio: 16:9
  - Frame rate: 25, 30, 50 and 60 frames/s

Electromagnetic Compatibility (EMC)	Complies with FCC Part 15, ICES-003, and CE regulations, including latest versions of EN 50130-4, EN 55022:2006 inc. AL:2007, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, and EN 50121-4 (Railway applications)
Product Safety	Complies with UL, CE, CSA, EN, and IEC Standards 60950-1 & 22
Environmental	In-ceiling: IP54, Plenum rated (with acrylic bubble) IK10 rating when using optional bubble VGA-BUBBLE-IK10 (sold separately) Indoor/Outdoor Pendant: IP66, NEMA 4X
ONVIF Conformance	EN 50132-5-2

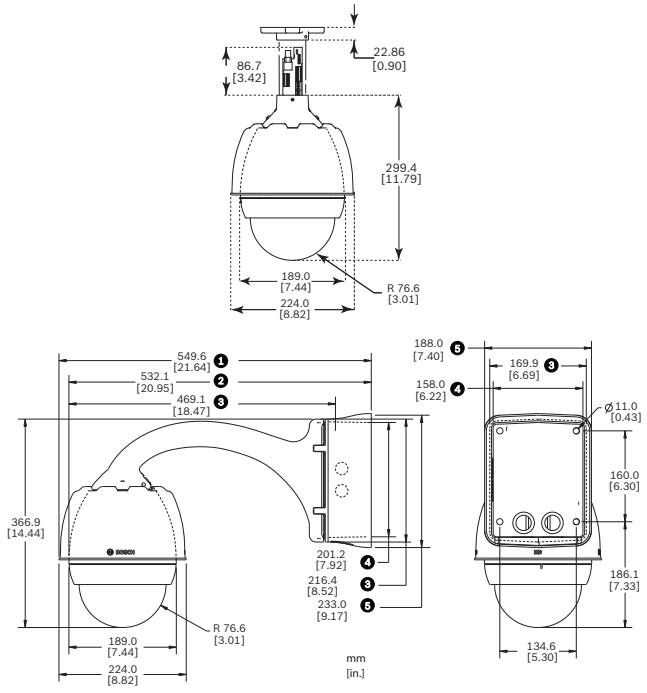
Notice

Conformity to EN 50130-4
One of the following power supply units is required to conform to the EN 50130-4 standard: VG4-A-PSU0, VG4-A-PSU1, VG4-A-PSU2, VG4-A-PA0, VG4-A-PA1, or VG4-A-PA2.

Installation/configuration notes

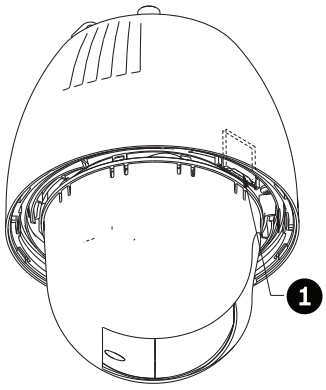


AUTODOME 7000 Dimensions – In-ceiling



AUTODOME 7000 Dimensions – Pendant, Pipe

1 Power supply box and sunshield
2 Sunshield removed
3 Mounting plate
4 Power supply box
5 Trim skirt



AUTODOME 7000 – Slot for SD card

1 Slot for SD card

Parts included

In-Ceiling

Quantity	Item
1	AUTODOME IP 7000 HD In-Ceiling camera with high-resolution acrylic bubble and white trim ring
1	Interface box
1	Optional black trim ring
1	Ceiling gasket (for IP54 conformance)
4	MAC address labels
1	Quick Guide

Outdoor Pendant

Quantity	Item
1	AUTODOME IP 7000 HD Pendant camera with clear acrylic bubble and sunshield
4	MAC address labels
1	Quick Guide

Notes:
–The pendant can be converted to an indoor pendant by removing the sunshield.
–Mounting hardware and accessories are available separately.

Technical specifications

Imager	1/2.8" progressive scan CMOS
Total sensor pixels	1945 x 1109 (2.16 M pixels)
Effective pixels	1080p: 1984 (H) x 1105 (V) (approximately 2.38M pixels) 720p: 1344 (H) x 745 (V)
Lens	20x optical zoom 4.9 mm (wide) to 94.0 mm (tele) (F 1.6 to F 3.5)
Field of View	59.5° (wide) to 3.3° (tele)
Focus	Auto (Sensitivity: normal, low), One-push AF, Manual, Interval AF, Zoom Trigger AF, Focus compensation in ICR on
Digital Zoom	12x

Sensitivity / Minimum Illumination (typical)	**30 IRE**	**50 IRE**
Day Mode (Color)		
Fixed shutter 1/30, High Sensitivity mode On	0.06 lux	0.2 lux
Fixed shutter 1/30, High Sensitivity mode Off	0.26 lux	0.83 lux
Fixed shutter ¼, High Sensitivity mode On	---	0.03 lux
Night Mode (Black and white)		
Fixed shutter 1/30, High Sensitivity mode On	0.033 lux	0.08 lux
Fixed shutter ¼, High Sensitivity mode On	0.0026 lux	---

Note: In Black and White (Night) mode / low light situations, High Sensitivity turns on automatically.

Electronic Shutter Speed	1/25 sec to 1/15,000 sec (12 steps)
Signal-to-noise Ratio(SNR)	>50dB (AGC off)
Noise Reduction	Intelligent Dynamic Noise Reduction
Backlight Compensation (BLC)	On/Off
Intelligent Defog	Intelligent Defog automatically adjusts parameters for best picture in foggy or misty scenes (switchable)"
White Balance	Auto, ATW, Indoor, Outdoor, Outdoor Auto, Sodium Vapor Lamp (Fix/Auto/Outdoor Auto), One-push, Manual
Day/Night	Mechanical switchable IR filter (Auto/On/off) Monochrome

Mechanical

	In-Ceiling	**Pendant**
Pan Range	360° cont.	360° cont.
Tilt Angle	1° above horizon	18° above horizon
Pre-position Speed	Pan: 400°/s Tilt: 300°/s	Pan: 400°/s Tilt: 300°/s
Pan/Tilt Modes		

• Turbo Mode (Manual Control)	Pan: 0.1°/s – 400°/s Tilt: 0.1°/s – 300°/s	
• Normal Mode	0.1°/s-120°/s	0.1°/s-120°/s
Preset Accuracy	± 0.1° typ.	± 0.1° typ.

Electrical

	In-Ceiling	Pendant
Input Voltage	21-30 VAC, 50/60 Hz; (class II) High PoE (with Bosch Midspan (NPD-6001A); required to power the heater) PoE+ (IEEE 802.3at, class 4 standard) (when used indoors, not powering the heater)	
Power Consumption, typical	24 W / 44 VA	60 W / 69 VA (heaters on) or 24 W / 44 VA (heaters off / without heater connected in power supply box for indoor applications)

Surge Suppression

Protection on Alarm Inputs	Peak current 17 A, peak power 300 W (8/20 µs)
Protection on Alarm Outputs	Peak current 2 A, peak power 300 W (8/20 µs)
Protection on Relay Output	Peak current 7.3 A, peak power 600 W (10/1000 µs)
Protection on Power Input (Dome)	Peak current 7.3 A, peak power 600 W (10/1000 µs)
Protection on Power Output (Arm Power Supply)	Peak current 21.4 A, peak power 1500 W (10/1000 µs)
10/100 Ethernet Data Lines	Peak current 14 A, peak power 200 W (8/20 µs)

Software Control

Camera Setup/ Control	Via web browser (such as Internet Explorer version 7.0 or later), Bosch Configuration Manager, Bosch Video Management System (BVMS), Bosch Recording Station (BRS), or Bosch Video Client (BVC)
Software Update	Network firmware upload

Network

Video compression	H.264 (ISO/IEC 14496-10), M-JPEG

Encoding / Streaming

	H.264		MJPEG
Scenario			
	Stream 1	**Stream 2**	**Stream 3**	**Stream 4**
1	Full HD 1080p30	Full HD 1080p5	I-frame only from Stream 1	1080p
2	Full HD 1080p30	HD 720p10	I-frame only from Stream 1	1080p
3	Full HD 1080p30	Downscaled stream	I-frame only from Stream 1	1080p
4	Full HD 1080p30	Copy of Stream 1	I-frame only from Stream 1	1080p
5	HD 720p60	HD 720p8	I-frame only from Stream 1	720p
6	HD 720p30	HD 720p30	I-frame only from Stream 1	720p
7	HD 720p30	Downscaled stream	I-frame only from Stream 1	720p
8	Downscaled stream	Downscaled stream	I-frame only from Stream 1	1080p

GOP Structure	IP, IBP, IBBP
Data Rate (Range)	9.6 kbps to 10 Mbps (per stream)
Overall IP Delay	240 ms

Resolutions (H x V)[)]

HD Resolutions	
• 1080p HD	1920 x 1080
• 720p HD	1280 x 720
Down-scaled SD streams	
• 432p SD	768 x 432
• 288p SD	512 x 288
• 144p SD	256 x 144
• Corridor mode	400 x 720
• D1 4:3 cropped	704 x 480
Ethernet	10-Base T/100 Base-TX, auto-sensing, half/full duplex, RJ45

Protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, Telnet, ARP, DHCP, SNTP, SNMP (V1, MIB II), 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox, CHAP, digest authentication
Advanced Networking	IPv6, QoS
Audio	
• Standard	G.711, 8 kHz sampling rate L16, 16 kHz sampling rate AAC, 16 kHz sampling rate
• Signal-to-Noise Ratio	>50 dB
• Audio Streaming	Bidirectional (full-duplex)

Local Storage

Memory Card Slot	User-supplied SD/SDHC/SDXC memory card (maximum 2TB – SDXC)
Recording	Continuous recording of video and audio, alarm/events/schedule recording

Fiber Optic Kit

VG4-SFPSCKT

Description	Fiber Optic Ethernet Media Converter kit [6]. Requires a small form-factor pluggable (SFP) module (sold separately).
Data Interface	Ethernet
Data Rate	10/100 Mbps IEEE 802.3 Compliant Full Duplex or Half Duplex Electrical Port Full Duplex Optical Port
Compatible Receiver	CNFE2MC
Installation	Installed inside a VG4-A-PA0, VG4-A-PA1, VG4-A-PA2, VG4-A-PSU1, or a VG4-A-PSU2 power supply box with supplied mounting hardware

6. Kit available separately and must be installed inside the AUTODOME power supply box.

SFP Modules

Description	Interchangeable modules available for use with MMF or SMF optical fiber.
Data Interface	Ethernet
Data Rate	10/100 Mbps IEEE 802.3 Compliant

Mechanical

Dimensions (LxWxH)	
• SFP-2 and SFP-3	55.5 x 13.5 x 8.5 mm (2.2 x 0.5 x 0.3 in.)
• SFP-25, SFP-26	63.8 x 13.5 x 8.5 mm (2.5 x 0.5 x 0.3 in.)
Weight (all SFP modules)	0.23 kg (.05 lb)

	Type	Connector	Wavelength (transmit / receive)	Max. Distance
SFP-2	MMF	Duplex LC	1310 nm / 1310 nm	2 km (1.2 miles)
SFP-3	SMF	Duplex LC	1310 nm / 1310 nm	20 km (12.4 miles)
SFP-25	MMF	Single SC	1310 nm / 1550 nm	2 km (1.2 miles)
SFP-26	MMF	Single SC	1550 nm / 1310 nm	2 km (1.2 miles)

Fiber Compatibility

Optical Fiber Compatibility, MMF	50/125 µm MMF. For 50/125 µm fiber, subtract 4 dB from the specified optical budget value. Must meet or exceed fiber standard ITU-T G.651.
Optical Fiber Compatibility, SMF	8–10/125 µm SMF. Must meet or exceed fiber standard ITU-T G.652.
Optical Distance Specifications	Specified transmission distances are limited to the optical loss of the fiber and any additional loss introduced by connectors, splices, and patch panels. The modules are designed to operate over the entire optical loss budget range, so they do not require a minimum loss in order to operate.

Miscellaneous

Sectors/Titling	16 independent sectors with a 20-character title/sector
Masking	24 individually configurable privacy masks
Pre-positions	256, each with a 20-character title
Guard Tours	Two (2) types of tours: • Recorded tours – two (2) • Preset tour – one (1), consisting of up to 256 scenes, consecutively
Supported Languages	English, Chinese, Dutch, French, German, Italian, Japanese, Polish, Portuguese, and Spanish

Note: Czech and Slovak languages are also supported.

User Connections

Power, Camera	RJ-45 10/100 Base-TX Ethernet (High Power-over-Ethernet (High PoE)) or PoE+ (IEEE 802.3at, class 4 standard) 21-30 VAC, 50/60 Hz
Power, Heater	RJ-45 10/100 Base-TX Ethernet (High Power-over-Ethernet (High PoE)) 21-30 VAC, 50/60 Hz
Video and Control	RJ-45 10/100 Base-TX Ethernet
Alarm Inputs (7)	2 supervised; 5 non-supervised Programmable for “normally open” or "normally closed"
Alarm Outputs (4)	1 dry contact relay; 3 open collector/ transistor outputs 32 VDC @ 150 ma max.
Audio	1 x mono line in, 1 x mono line out
• Signal line in	12 kOhm typical, 1 Vrms max
• Signal line out	1 Vrms at 1.5 kOhm, typical

Environmental

	In-Ceiling (with acrylic bubble)	Pendant (with acrylic bubble)
Ingress Protection Rating/ Standard	IP54, Plenum rated	IP66, NEMA 4X
Operating Temperature (with heater wired)	-10 to +40 °C (+14 to +104 °F)	-34 to +74 °C (-30 to +165 °F) (in accordance with NEMA TS 2-2003 (R2008), section 2.1.5.1) -40 to +55 °C (-40 to +131 °F) (continuous operation)
Operating Temperature (without heater wired)		-10 to +55 °C (+14 to +131 °F) (continuous operation)
Storage Temperature	-40 to +60 °C (-40 to +140 °F)	-40 to +60 °C (-40 to +140 °F)
Operating Humidity	0% to 90% RH, non-condensing	0% to 100% RH, condensing [7]

7 For outdoor pendants only, condensing humidity implies moisture can condense to water droplets.

NEMA TS 2-2003 (R2008), para 2.1.5.1 using fig. 2.1 test profile	-34 ºC to +74 ºC (-30 ºF to +165 ºF)

Note: TS2 conformance applies to outdoor models only.

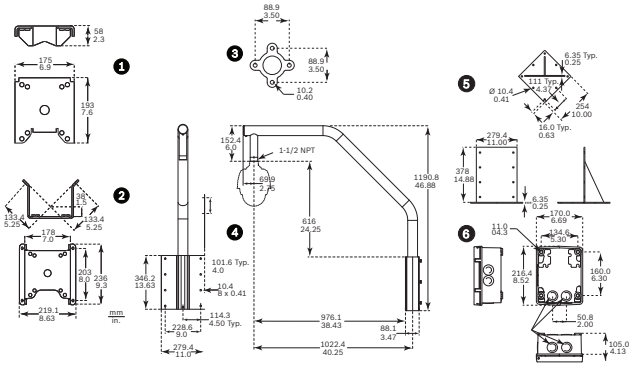
Construction

Dimensions	See dimensional drawings
Weight	
• In-ceiling	2.59 kg (5.71 lb)
• Indoor/Outdoor Pendant	3.07 kg (6.77 lb)
Bubble Size	153.1 mm diameter (6.03 in.)
Construction Material	
• Housing	In-ceiling: Magnesium Pendant: Cast aluminum
• Bubble	In-ceiling: HD High-resolution acrylic Pendant: High-resolution acrylic
Standard Color	White (RAL 9003)
Standard Finish	Powder coated, sand finish

Mounts/Accessories

Bubbles	
In-ceiling	
Clear HD high-resolution acrylic	VGA-BUBHD-CCLA
Tinted HD high-resolution acrylic *(Included with in-ceiling camera models.)*	VGA-BUBHD-CTIA
Pendant	
Clear high-resolution acrylic *(Included with pendant camera models.)*	VGA-BUBBLE-PCLA
Tinted high-resolution acrylic	VGA-BUBBLE-PTIA
Clear rugged IK10-rated nylon	VGA-BUBBLE-IK10
Pendant Arm Mounts	
Wall Arm (No Transformer)	VG4-A-PA0
Wall Arm (120/230 VAC Transformer)	VG4-A-PA1 / VG4-A-PA2
Pendant Arm with Wiring	VGA-PEND-ARM
Mounting plate for VGA-PEND-ARM	VGA-PEND-WPLATE
Trim skirt for VG4 Series Power Supplies	VG4-A-TSKIRT
Optional Mounting Plates for Arm Mounts	
Corner Mounting Plate	VG4-A-9542
Mast (Pole) Mounting Plate	VG4-A-9541
Pendant Pipe Mounts	
Pipe Mount Cap	VG4-A-9543
Pendant Roof Mounts	

Roof (Parapet) Mount (VG4-A-9543 Pipe Mount Cap required. Available separately.)	VGA-ROOF-MOUNT (1.5-inch NPT tapered male threads)
Optional Mounting Plates for Roof Mounts	
Flat Roof Adapter for Parapet Mount	LTC 9230/01
In-ceiling Support Kits	
Bracket for suspended or drop ceilings	VGA-IC-SP
Power Supplies	
High PoE Midspan 60W, single port, AC in	NPD-6001A
Outdoor Power Supply Box, no transformer	VG4-A-PSU0
Outdoor Power Supply Box (120/230 VAC Transformer)	VG4-A-PSU1 / VG4-A-PSU2
Fiber Optic Kit	VG4-SFPSCKT



AUTODOME Dimensions - Mounts

1 Mast Mount
2 Corner Mount
3 Pipe Mount
4 Roof Mount
5 Roof Mount Adapter
6 Power Supply for Pipe and Roof Mounts

Ordering information

AUTODOME IP 7000 HD (20x In-Ceiling)
Superb quality indoor, in-ceiling PTZ dome camera with 1080p HD resolution; 20x optical zoom; IVA; PoE; iSCSI/SD; multiple pre-programmed user modes; H. 264 quad-streaming (CPP4); tinted bubble. Rated IP54.
Order number **VG5-7220-CPT5**

AUTODOME IP 7000 HD (20x Indoor/Outdoor Pendant)
Superb quality indoor/outdoor pendant PTZ dome camera with 1080p HD resolution; 20x optical zoom; IVA; PoE; iSCSI/SD; multiple pre-programmed user modes; H.264 quad-streaming (CPP4); clear bubble. Rated IP66.
Order number **VG5-7220-EPC5**

Accessories

High PoE Midspan, 60 W, single port, AC in
High Power, 60 W Single Port PoE Midspan with AC in
Order number **NPD-6001A**

VG4-A-PSU0 24 VAC Power Supply Unit
Power supply, 24 VAC input, for a PTZ camera in the AUTODOME Series. White, aluminum enclosure with cover, rated IP66 and IK 08. 100 W output. Optional trim skirt (sold separately).
Order number **VG4-A-PSU0**

VG4-A-PSU1 120 VAC Power Supply Unit
Power supply with transformer, 120 VAC input, for an AUTODOME or MIC7000 Series PTZ camera. White, aluminum enclosure with cover, rated IP66 and IK 08. 100 W output. Optional trim skirt (sold separately).
Order number **VG4-A-PSU1**

VG4-A-PSU2 230 VAC Power Supply Unit
Power supply with transformer, 230 VAC input, for an AUTODOME or MIC7000 Series PTZ camera. White, aluminum enclosure with cover, rated IP66 and IK 08. 100 W output. Optional trim skirt (sold separately).
Order number **VG4-A-PSU2**

VGA-PEND-ARM Pendant Arm with Wiring
Compatible with an AutoDome Series pendant housing
Order number **VGA-PEND-ARM**

VGA-PEND-WPLATE Mounting Plate
Mounting plate for VGA-PEND-ARM, compatible with an AutoDome Series camera
Order number **VGA-PEND-WPLATE**

VGA-ROOF-MOUNT Roof Mount
Roof parapet mount, white
(VG4-A-9543 Pipe Mount Cap required. Available separately.)
Order number **VGA-ROOF-MOUNT**

LTC 9230/01 Flat Roof Mount Adapter
For mounting a unit in an upright position on a flat surface for roof parapet mount VGA-ROOF-MOUNT
Order number **LTC 9230/01**

VG4-A-9541 Pole Mount Adapter
Pole mount adapter for an AUTODOME pendant arm or a DINION imager, designed for poles with a diameter of 100-380 mm (4-15 in.), white
Order number **VG4-A-9541**

VG4-A-9542 Corner Mount Adapter
Corner mount adapter for an AUTODOME pendant arm or a DINION imager
Order number **VG4-A-9542**

VG4-A-9543 Pipe Mount
Pipe mount, white, for an AutoDome Series pendant housing
Order number **VG4-A-9543**

VGA-IC-SP In-ceiling Support Kit
Suspended ceiling support kit for dome cameras. Aperture Ø177 mm (Ø7 in); maximum supported weight 11.3 kg (25 lb)
Order number **VGA-IC-SP**

VGA-SBOX-COVER Cover for AutoDome Power Supply Boxes
Order number **VGA-SBOX-COVER**

VG4-A-TSKIRT Trim Skirt for AutoDome Power Supply Boxes
Trim skirt for the following AutoDome Series power supply boxes:
VG4-A-PSU0, VG4-A-PSU1, and VG4-A-PSU2
Order number **VG4-A-TSKIRT**

VGA-BUBBLE-CCLA Clear High-resolution Bubble for an In-ceiling Housing
Low-impact acrylic bubble
Order number **VGA-BUBBLE-CCLA**

VGA-BUBBLE-CTIA Tinted High-resolution Bubble for an In-ceiling Housing
Low-impact acrylic bubble
Order number **VGA-BUBBLE-CTIA**

VGA-BUBBLE-PCLA Clear High-resolution Bubble for a Pendant Housing
Low-impact acrylic bubble
Order number **VGA-BUBBLE-PCLA**

VGA-BUBBLE-PTIA Tinted High-resolution Bubble for a Pendant Housing
Low-impact acrylic bubble
Order number **VGA-BUBBLE-PTIA**

VGA-BUBBLE-IK10 IK10 Bubble for pendant housing
IK10-rated bubble qualified for use with AUTODOME 7000 HD cameras with pendant housings
Order number **VGA-BUBBLE-IK10**

VG4-SFPSCKT Fiber Optic Ethernet Media Converter Kit
Ethernet media converter video transmitter/data receiver fiber optic kit for AUTODOME cameras and for MIC-IP-PSU for MIC analog cameras.
Order number **VG4-SFPSCKT**

SFP-2 Small Form-factor Pluggable Optical Interface
SFP Fiber Optic Module, Multi-mode, 1310 nm, 2 km (1.2 miles), 2 LC connectors
Order number **SFP-2**

SFP-3 Small Form-factor Pluggable Optical Interface
SFP Fiber Optic Module, Single-mode, 1310 nm, 20 km (12.4 miles), 2 LC connectors
Order number **SFP-3**

SFP-25 Small Form-factor Pluggable Optical Interface
SFP Fiber Optic Module, Multi-mode, 1310/1550 nm, 2 km (1.2 miles), 1 SC connector
Order number **SFP-25**

SFP-26 Small Form-factor Pluggable Optical Interface
SFP Fiber Optic Module, Multi-mode, 1550/1310 nm, 2 km (1.2 miles), 1 SC connector
Order number **SFP-26**

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