AUTODOME IP starlight 7000 HD

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BOSCH

Invented for life

- ▶ High-resolution, 720p HD PTZ camera with high-performance 30x zoom lens for capturing fine details in scenes with extremely low illumination level

- ▶ 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 streams, based on Bosch's Common Product Platform (CPP4)

- ▶ Easy and intuitive installation with multiple preconfigured user modes that allow users to select the camera configuration that is ideal for their applications

The AUTODOME IP starlight 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) 720p50/60 video and 30x 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 camera with starlight technology

Extreme low-light sensitivity makes this camera an exceptional performer in all lighting conditions. In low light, the camera automatically switches from color to monochrome by removing the IR filter to boost sensitivity, while maintaining superior image quality. For operation in the darkest conditions, automatic control of shutter speeds increases sensitivity by more than 50 times.

Starlight models have a 720p50/60 HD imaging platform with starlight technology. The camera produces detailed video images in scenes with limited ambient lighting, without any motion blur associated with cameras that use slow shutters. The camera has been tuned to deliver high-quality HD video in both day and night operation.

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). Images under these conditions may 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.

Intelligent Defog
Users can configure the mode to be active continuously, or to activate automatically when the video analytics in the camera detect fog and add light to the video image (and then deactivate when the fog clears or the scene changes).

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 on-site programming 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 – Ideal mode for indoor applications where lighting is constant and not changing
- 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.

Image Stabilization
As PTZ cameras continue to increase their optical zoom capabilities, image stabilization becomes critical to eliminate movement caused by unstable camera mounts. Minor movement of the camera mount can shift the field of view by a large distance when the camera is zoomed to a high value. This can render images unusable. The camera incorporates an Image Stabilization algorithm that allows the camera to detect continuous vibration. If it detects vibration, the camera dynamically corrects the shaky video in both the vertical and horizontal axis, resulting in exceptional image clarity and a stable field of view on the monitor.

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.

Sophisticated alarm responses
The camera supports advanced alarm control that uses sophisticated rules-based logic to determine how to manage alarms. In its most basic form, a "rule" could

define which input(s) should activate which output(s). In a more complex form, inputs and outputs can be combined with pre-defined or user-specified commands to perform advanced camera functions.

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.

Content Based Imaging Technology
Content Based Imaging Technology (CBIT) is used to radically improve image quality in all lighting conditions and to identify areas for enhanced processing. The camera examines the scene using intelligent video analytics and provides feedback to re-tune the image processing. This provides better detail in the areas that matter and better all-round performance. The Intelligent Defog technology, for example, allows you to view video clearly through a foggy scene or can improve contrast in dark areas of a scene.

Intelligent Dynamic Noise Reduction reduces bandwidth and storage requirements
The camera uses Intelligent Dynamic Noise Reduction (IDNR) which actively analyzes the contents of a scene and reduces noise artifacts accordingly.
The low-noise image and the efficient H.264 compression technology combine to provide clear images while reducing bandwidth and storage by up to 30% compared to other H.264 cameras. This results in reduced-bandwidth streams that still retain a high image quality and smooth motion. The camera provides the most usable image possible by cleverly optimizing the detail-to-bandwidth ratio.

Bitrate optimized profile
The average typical optimized bitrate in kbits/s for various frame rates is shown in the table:

IPS	720p	480p
60	2600	2000

30	1300	1000
15	1100	800
10	1000	700
5	600	450
2	270	200

Actual bitrate may vary depending on the scene complexities and encoding configurations.

Intelligence

With built-in Intelligent Video Analysis (IVA), the camera reinforces the concept of Intelligence at the Edge. IVA is Bosch's state-of-the-art intelligent video content analysis technology. With IVA, the camera reliably detects and analyzes moving objects while suppressing unwanted alarms from spurious sources in the image. IVA also allows the camera to detect multiple object behaviors including idle and removed objects, loitering, multiple line crossing, and trajectories. IVA supports BEV (Bird's-Eye-View) People Counter and Assisted Self-Calibration. Configurable detection filters improve reliability and reduce operator work load.

Intelligent Tracking

The camera utilizes the built-in Intelligent Video Analytics (IVA) to follow an individual or an object continuously. Objects detected by IVA 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 tracking feature 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 "noise" 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 no motion is expected in the scene.
- **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.

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.

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.

Advanced streaming

The camera offers advanced streaming capabilities so that you can configure the camera to take advantage of the latest network technology.
The camera is designed on the most efficient and powerful H.264 encoding platform capable of delivering high-quality HD video with very low network load. The new intelligent encoding capabilities drops the bandwidth consumption to extremely low levels if the camera detects no motion in the scene.
The camera is capable of quad streaming which allows the camera to be configured to deliver independent, configurable streams for live viewing, recording, or remote monitoring on constrained bandwidths.

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.

ONVIF conformant

The camera conforms to the ONVIF (Open Network Video Interface Forum) specification which guarantees interoperability between network video products regardless of manufacturer. The ONVIF Profile S specification allows easy integration with other conformant devices and VMS. ONVIF conformant devices are able to exchange live video, audio, metadata, and control information, and ensure that they are automatically discovered and connected to network applications such as video management systems.

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.

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.

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. 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.

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.

Easy upgrade
Remotely upgrade the camera whenever new firmware becomes available. This ensures up-to-date products, thus protecting investment with little effort.
As with all Bosch products, the camera is designed using the industry's best design process and is subjected to the most stringent testing standards such as HALT (highly accelerated life testing), which pushes the limits of products to ensure reliability throughout their lifetime.

Certifications and approvals

HD standards
Complies with the SMPTE 296M-2001 Standard in:
- Resolution: 1280x720
- Scan: Progressive
- Color representation: complies with ITU-R BT.709
- Aspect ratio: 16:9
- Frame rate: 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

> **ℹ️ 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.

Parts included

In-Ceiling

Quantity	Item
1	AUTODOME IP starlight 7000 HD **In-Ceiling** camera with tinted acrylic bubble and white trim ring
1	Interface box
1	Optional black trim ring
1	Ceiling gasket (for IP54 conformance)
1	Product DVD (which includes complete Operation Manual)
1	Packet of printed Safety literature

Outdoor Pendant

Quantity	Item
1	AUTODOME IP starlight 7000 HD Pendant camera with clear acrylic bubble and sunshield
1	Packet of printed Safety literature
1	Product DVD (which includes complete Operation Manual)
1	Packet of printed Safety literature

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

Technical specifications

AUTODOME IP starlight 7000 HD camera

Imager	1/3-type Exmor CMOS sensor
Effective Picture Elements (Pixels)	1305 x 1049 (1.37 MP)
Lens	30x Zoom 4.3 mm to 129 mm F1.6 to F4.7
Field of View (FOV)	2.1° to 59°
Focus	*Automatic with manual override*
Iris	*Automatic with manual override*
Digital Zoom	*12x*

Sensitivity / Minimum Illumination (typical)	30 IRE	50 IRE
Day Mode (Color)		
Fixed shutter 1/30, High Sensitivity mode On	0.052 lux	0.166 lux
Fixed shutter 1/30, High Sensitivity mode Off	0.26 lux	0.66 lux
SensUp On (max. ¼), High Sensitivity mode On	0.0082 lux	0.033 lux
Night Mode (Black and white)		
Fixed shutter 1/30, High Sensitivity mode On	0.0103 lux	0.041 lux
Fixed shutter 1/4, High Sensitivity mode On	0.00129 lux	---
SensUp On (max. ¼), High Sensitivity mode On	0.00065 lux	0.00205 lux

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

Additional Camera Settings

Gain Control	Auto/Manual/Max
Aperture Correction	Horizontal and vertical
Electronic Shutter Speed (AES)	1/1 sec to 1/10000 sec (22 steps)
Dynamic Range	90 dB typical
Signal-to-Noise Ratio (SNR)	>50 dB
Backlight Compensation (BLC)	On/Off
White Balance	2000 K to 10,000 K ATW, AWB Hold, Extended ATW, Manual, Sodium Lamp Auto, Sodium Lamp
Day/Night	Monochrome, Color, Auto
Defog mode feature	Improves visibility when viewing foggy or other low-contrast scenes.

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

Communications Protocols	Standard Bosch IP protocol, including ONVIF and SNMP v1
Standards / Video compression	H.264 (ISO/IEC 14496-10), M-JPEG, JPEG
Streaming	Four (4) streams with individually configurable frame rate and resolution: • Two (2) independently configurable H.264 recording streams • Two (2) non-recording streams (profiles)
Stream 1 (recording)	Options are: - H.264 MP 720p50/60 fixed; - H.264 MP SD

Note: The options available for Stream 1 depend on the value in the **Max. frame rate** field in the Installer Menu in camera configuration.

Stream 2 (recording)	Options vary depending on Stream 1 selection. Options with "H.264 MP 720p50/60 fixed" selected for Stream 1: - Copy Stream 1 - H.264 MP SD; - H.264 MP 720p6/7 fixed; - H.264 MP upright (cropped); - H.264 MP D1 4:3 (cropped); Option with "H.264 MP SD" selected for Stream 1: H.264 MP SD

Non-recording profiles	Two (2) streams, I-frame only Options are: - HD Image Optimized; - HD Balanced; - HD Bit Rate Optimized; - SD Image Optimized; - SD Balanced; - SD Bit Rate Optimized; - DSL Optimized; - 3G Optimized

Resolution (H x V)	
720p HD	1280 x 720
432p SD	768 x 432
288p SD	512 x 288
144p SD	256 x 144

Protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, Telnet, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (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
Ethernet	10BASE-T/100BASE-TX, auto-sensing, half/full duplex
Encryption	TLS 1.0, SSL, DES, 3DES, AES
Ethernet connector	RJ45
Connectivity	ONVIF Profile S, Auto-MDIX
GOP Structure	IP, IBP, IBBP
Data Rate	9.6 kbps to 6 Mbps
Overall IP Delay	240 ms (typical)
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

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.

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

Polycarbonate bubbles are not recommended for use with HD products because of optical degradation.

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

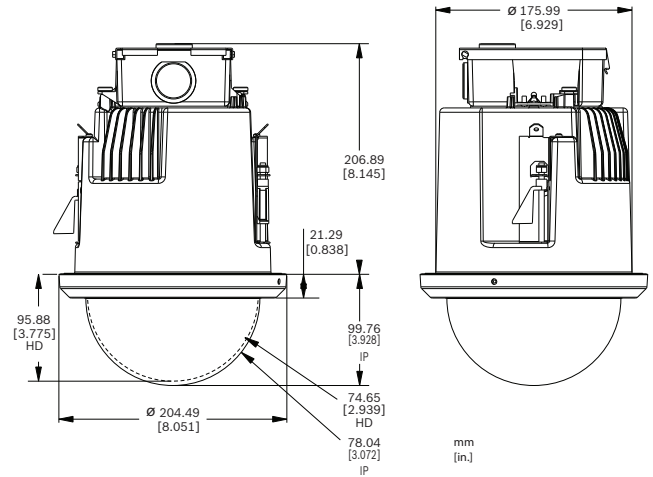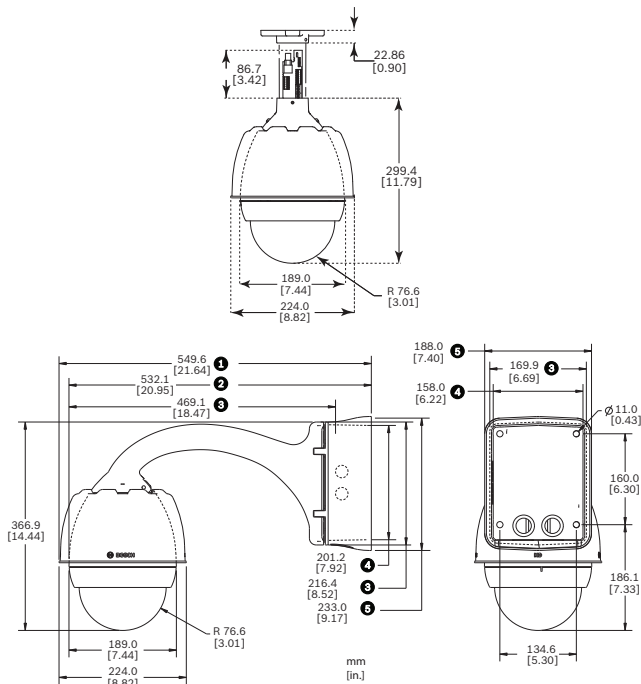|	
High PoE Midspan 60W, single port, AC in	NPD-6001A
Outdoor Power Supply Box, no transformer	VG4-A-PSU0
Outdoor Power Supply Box (120/230 VAC Transformer)	VG4-A-PSU1 / VG4-A-PSU2
Fiber Optic Kit	VG4-SFPSCKT

Dimensional Drawings
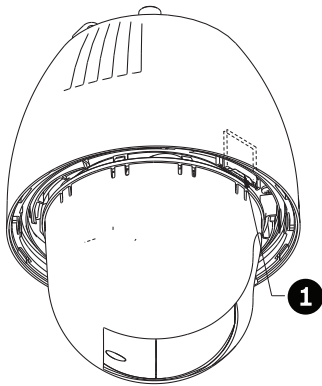
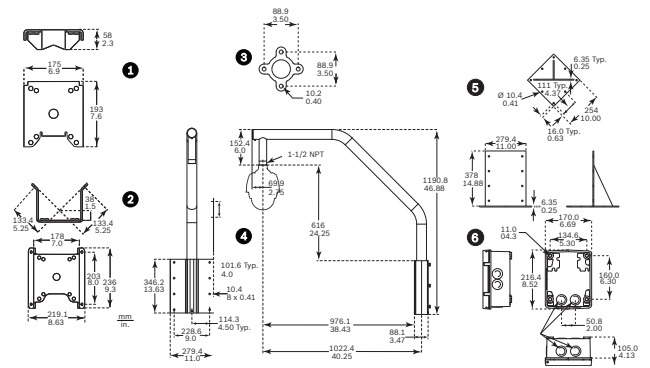*AUTODOME 7000 – Slot for SD card*

1   Slot for SD card

AUTODOME 7000 Dimensions – Pendant, Pipe

1   Power supply box and sunshield

4   Power supply box

2   Sunshield removed

5   Trim skirt

3   Mounting plate

AUTODOME 7000 Dimensions – In-ceiling

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

VG5-7130-EPC4 AUTODOME starlight 7000 HD camera, 720p60, 30x zoom, pendant, with clear bubble
Superb quality indoor/outdoor IP PTZ dome camera. 720p HD resolution; 30x optical zoom; IVA; PoE; iSCSI/SD; multiple pre-programmed user modes; H.264 quad-streaming (CPP4); IP66; pendant mount, clear bubble.
Order number **VG5-7130-EPC4**

VG5-7130-CPT4 AUTODOME starlight 7000 HD camera, 720p60, 30x zoom, in-ceiling, tinted bubble
Superb quality indoor IP PTZ dome camera. 720p HD resolution; 30x optical zoom; IVA; PoE; iSCSI/SD; multiple pre-programmed user modes; H.264 quad-streaming (CPP4); IP66; in-ceiling mount, tinted bubble.
Order number **VG5-7130-CPT4**

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**

VG4-A-PA0 Pendant Arm Mount
Pendant arm mount with power supply box for an
AUTODOME Series camera, no transformer, white
Order number **VG4-A-PA0**

VG4-A-PA1 Pendant Arm Mount with 120 VAC Transformer
Pendant arm mount with power supply box for an
AUTODOME Series camera with a 120 VAC
transformer, white
Order number **VG4-A-PA1**

VG4-A-PA2 Pendant Arm Mount with 230 VAC Transformer
Pendant arm mount with power supply box for an
AUTODOME Series camera with a 230 VAC
transformer, white
Order number **VG4-A-PA2**

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-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-BUBHD-CCLA Clear HD High-Resolution Acrylic Bubble for In-Ceiling AUTODOME cameras
Order number **VGA-BUBHD-CCLA**

VGA-BUBHD-CTIA Tinted HD High-Resolution Acrylic Bubble for In-Ceiling AUTODOME cameras
Order number **VGA-BUBHD-CTIA**

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**