# **AutoDome 700 Series IP PTZ Camera**

www.boschsecurity.com

















- ► Choice of 36x or 28x day/night night cameras with 12x digital zoom and wide dynamic range
- ► Intelligent Tracking automatically detects and tracks an object in motion
- ► Progressive scan provides smooth and clear images when viewing details in a moving image
- ► Sodium Vapor White Balance mode restores objects to their original color
- ► Quad video streaming generates simultaneous H.264 and M-JPEG video streams

The AutoDome 700 Series is an easy to install, indoor/outdoor IP PTZ camera with superb video quality. This discrete, high-speed dome camera features day/night functionality for quality images in low light conditions. The AutoDome 700 Series provides direct network connection using H.264 and M-JPEG compression and bandwidth throttling to efficiently manage bandwidth and storage requirements while delivering outstanding image quality. The AutoDome 700 Series provides complete network-based control of all dome functionality including pan/tilt/zoom operation, presets, tours, alarms, as well as web-based configuration of all dome settings.

The AutoDome 700 Series conforms to the ONVIF (Open Network Video Interface Forum) specifications. ONVIF conformance guarantees interoperability between the AutoDome and network video products regardless of manufacturer.

### AutoDome 700 Series highlights

The AutoDome 700 Series delivers state-of-the-art technology and features that far exceed other PTZ cameras. The cameras achieve a high horizontal resolution enabling the reproduction of clear and detailed images. The cameras feature, progressive

scan technology, wide dynamic range, and sodium vapor lamp white balance ensuring clear image detail from extreme lighting environments.

## Intelligent Tracking

The AutoDome utilizes the built-in Intelligent Video Analytics (IVA) to continuously follow an individual or an object. The AutoDome uses objects detected by IVA in a stationary position to activate the Intelligent Tracking feature. Intelligent Tracking controls the pan/tilt/zoom actions of the camera to keep the selected object in the scene.

The Intelligent Tracking feature shows its real intelligence when an actively tracked object is lost. Other cameras simply give up when a tracked object stops moving or is momentarily concealed by a stationary object. Intelligent Tracking uses an advanced algorithm that continuously scans the scene for a lost object and resumes tracking when the object reappears or if the camera detects motion along the same trajectory.

#### Wide Dynamic Range

The AutoDome features Wide Dynamic Range (WDR) technology that allows for the capture of clear images from both bright and dark areas in the same frame. WDR ensures that bright areas are not saturated and that dark areas are not too dark.

#### Progressive scan

The AutoDome camera is ideally suited for IP imaging applications. The progressive scan technology incorporated into the camera provides smooth and clear images when viewing images from a moving camera.

## Sodium vapor lamp white balance

The AutoDome is an exceptional performer when shooting under a sodium vapor lamp (a street lamp or tunnel lamp, for example). Images under these conditions may have a yellowish tint, which may make identification difficult. In the Sodium Vapor White Balance mode, the AutoDome automatically compensates for the light from a sodium vapor lamp to restore objects to their original color.

#### Integration and installation

The AutoDome 700 Series maximizes your security investment by integrating with Bosch video storage products, as well as the full range of Bosch video over IP products.

And, the AutoDome 700 Series is simple to install and use. The pendant housing comes with a sunshield for outdoor applications. This sunshield can be easily removed for indoor environments. Bosch offers a full complement of hardware (as a separate purchase) for wall, corner, mast, roof, pipe, and in-ceiling mount applications for indoor and outdoor environments.

### **System Overview**

## High-performance PTZ day/night camera

The AutoDome 700 Series camera has a 1/4-in. CCD sensor, with 4CIF/D1 resolution and sensitivity to below 1.0 lux and is available with a choice of 28x and the industry-leading 36x optical zoom lens, and all 700 Series cameras offer a full 12x digital zoom. Both camera options provide D1 horizontal resolution for outstanding clarity and image detail. The cameras also incorporate technology that dramatically improves the dynamic range by 128 times. Also known as WDR (wide-dynamic range), it results in clear image reproduction in extreme high-contrast environments. Day/night capabilities and outstanding sensitivity make AutoDome 700 Series cameras exceptional performers in all lighting conditions. In low light, these cameras automatically switch from color to monochrome by removing the IR filter to boost the infrared illumination sensitivity, while maintaining superior image quality. For operation in the darkest conditions, the SensUp control feature automatically reduces the shutter speed to as little as one second. This increases sensitivity by more than 50 times.

#### Accurate control and positioning

The AutoDome supports 99 pre-positions and two styles of Guard Tours: Preset and Record/Playback. The preset standard tour is capable of storing 99 sequential pre-positions with a configurable dwell time between pre-positions. The AutoDome Series also provides support for two recorded tours, which have a

combined duration of 15 minutes of movements. These are recorded macros of an operator's movements, including pan, tilt, and zoom activities, and can be played back in a continuous manner. Pan and tilt preset repeatability are accurate to within ±0.1 degrees to ensure that the correct scene is captured every time. The AutoDome 700 Series delivers variable pan/tilt speeds from a crawl speed of only 0.1 degrees per second up to an ultra-quick 120 degrees per second. The dome is capable of pan speeds of 360 degrees per second and tilt speeds of 100 degrees per second between prepositions. The AutoDome 700 Series provides a tilt range of 0 to 94 degrees, and a pan range of up to 360 degrees continuous rotation.

The AutoScaling (proportional zoom) and AutoPivot (automatically rotates and flips the camera) features ensure optimal control.

#### Ultra-efficient H.264 encoding

The AutoDome 700 Series uses an advanced H.264 encoder to create DVD-quality streaming video at ultralow bit rates. Use of H.264 encoding, bandwidth throttling, and multicasting capabilities, minimizes bandwidth and storage usage to significantly reduce costs.

### Multiple video streams

The cameras use H.264 (Main Profile) compression, bandwidth throttling, and multicasting capabilities to manage bandwidth and storage requirements efficiently, while delivering high image quality and resolution.

Bosch's innovative quad-streaming feature enables AutoDome 700 Series cameras to generate two independent H.264 streams, an I-frame recording stream, and an M-JPEG stream simultaneously. This flexibility allows streaming of high-quality H.264 images for live viewing and recording while streaming M-JPEG images to another device at the same time. The M-JPEG video stream also provides easy integration with third-party JPEG or M-JPEGcompatible video management systems. AutoDome 700 Series cameras offer unparalleled recording options. Attached to the network, they can use iSCSI targets directly without needing any recording software. The recording management capabilities of the system can be further enhanced by using the Bosch Video Recording Manager (VRM).

#### **ONVIF** conformant

The AutoDome 700 Series conforms to the ONVIF (Open Network Video Interface Forum) specification guaranteeing interoperability between network video products regardless of manufacturer. 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.

### 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.

## 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.

## **Fiber Optic Kit**

Bosch offers the optional VG4-SFPSCKT, a unique media converter module for use with 700 Series AutoDomes. This media converter module is designed to accept a wide-range of 10/100 Mbps SFP modules for use with Multimode or Singlemode optical fiber with LC or SC connectors.

The media converter module along with the SFP module is user-installed directly into the AutoDome's power supply box to provide an integrated fiber optic solution.

#### Ease of installation and servicing

The AutoDome 700 Series 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. AutoDome in-ceiling housings provide IP54 protection (with an optional gasket kit) and are rated IK 8 (IEC 62262). These housings feature an impactresistant polycarbonate rugged bubble to protect your

camera from vandalism. The rugged bubble can withstand impacts equivalent to a 4.5 kg (10 lb) weight dropped from a height of 3 m (10 ft). Outdoor Pendant housings are rated to provide IP 66 protection and are offers an operating temperature range down to -40°C (-40°F). The outdoor pendant comes fully assembled with a sunshield and ready for wall or pipe applications with the proper mounting hardware (purchased separately). In addition, the pendant housing comes 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. Note: Bosch offers a full complement of hardware and accessories (as a separate purchase) for corner, mast, roof, pipe, and in-ceiling applications, which allow the AutoDome to be easily adapted to individual site requirements.

#### **Unsurpassed reliability**

As with all Bosch products, the AutoDome 700 Series has been subjected to the industry's most comprehensive and demanding battery of endurance tests such as HALT (highly accelerated life testing) to make sure it will hold up through years of use. And of course, it comes with Bosch's industry-leading 3-year warranty.

#### **Functions**

The following are some of the features that make the AutoDome 700 Series the perfect fit for a variety of surveillance applications.

#### Inputs and outputs

The AutoDome 700 Series can handle two (2) alarm inputs and one (1) open-collector alarm output, which can drive an external device.

#### iSCSI device support

Built-in iSCSI support allows the AutoDome 700 Series to stream video directly to an iSCSI RAID array. This enables efficient video storage and overall system scalability without compromise to recording performance when paired with suitable iSCSI storage arrays.

#### **Network-based control and configuration**

The AutoDome 700 Series enables full camera control and configuration capabilities over the network. Operators or technicians can control camera pan/tilt/zoom operation, presets, tours, and alarm management functions virtually anywhere without need for additional wiring.

The embedded web server lets the installer access all the user settings, make camera adjustments, and update firmware via a standard web browser.

## **Device management**

Simple Network Management Protocol (SNMP) support facilitates the remote monitoring and management. The AutoDome 700 Series provides full support for SNMP v3.

## Superior privacy masking

The AutoDome 700 Series provides 24 individual, easy to configure privacy masks, with up to 24 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.

## **Unsurpassed flexibility**

There are many ways to access the camera's video: on a PC using a web browser, with the Bosch Video Management System (VMS), or with the Bosch Video Client.

### Easy upgrade

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

## **Access security**

Various security levels are available for accessing the network, the camera, and the data channels. As well as password protection with three levels, 802.1x authentication using a RADIUS (Remote Authentication Dial In User Service) server is supported. To secure Web browser access, use HTTPS with a SSL certificate stored in the camera. For total data protection, the video and audio communication channels can be independently AES encrypted with 128-bit keys by installing the optional encryption site license.

### **Certifications and Approvals**

Electromagnetic Compatibility (EMC)	Complies with FCC Part 15, ICES-003, and CE regulations, including EN50130-4 and EN50121-4
Product Safety	Complies with CE regulations, UL, CSA, EN, and IEC Standards
Environmental	In-ceiling: IP54 (with optional VGA-IP54K-IC78 kit), Plenum rated Pendant: IP66

## **Parts Included**

## In-ceiling

1	Fully-assembled in-ceiling housing
1	Polycarbonate bubble, clear
1	Interface box

#### **Outdoor Pendant**

1	Fully-assembled outdoor pendant housing with sunshield
1	Acrylic bubble, clear

### Notes:

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

### **Technical Specifications**

## Camera 36x Day/Night

Imager	1/4 intype Exview HAD CCD (progressive scan)
Effective Picture Elements	PAL: Approx. 440,000; 752(H) x 582(V) NTSC: Approx. 380,000; 768 (H) x 494 (V)
Lens	36x Zoom (3.4–122.4 mm) F1.6 to F4.5

Zoom Movement Speed	NTSC	PAL
Optical WIDE / Optical TELE – Focus Tracking ON	4.0 sec.	4.0 sec.
Optical WIDE / Optical TELE – Focus Tracking OFF	2.7 sec.	2.7 sec.
Optical WIDE / Digital TELE	6.0 sec.	6.2 sec.
Digital WIDE / Digital TELE	2.1 sec.	2.3 sec.

Focus	Automatic with manual override
Iris	Automatic with manual override
Optical Zoom Field of View	1.7° to 57.8°
Gain Control	Auto/Manual/Max. (–3 dB to 28 dB, 2 dB steps)
Synchronization	Line-Lock (–120° to 120° vertical phase adjust) or internal crystal
Aperture Correction	Horizontal and vertical
Digital Zoom	12x

Sensitivity (typical) <sup>1</sup>	30 IRE	50 IRE
Day Mode		
SensUp Off	0.66 lux (0.061 fc)	1.4 lux (0.13 fc)
SensUp On (NTSC: 1/4s, 15X; PAL 1/3s, 16.7X)	0.04 lux (0.0037 fc)	0.1 lux (0.0092 fc)
Night Mode		
SensUp Off	0.104 lux (0.0097 fc)	0.209 lux (0.0194 fc)
SensUp On (NTSC: 1/4s, 15X; PAL 1/3s, 16.7X)	0.0052 lux (0.0005 fc)	0.0103 lux (0.001 fc)
Electronic Shutter Speed	1/1 to 1/10,000 sec., 22 steps	
Wide Dynamic Range (WDR)	92 dB (50 dB with WDR Off)	
Signal-to-Noise Ratio (SNR)	>50 dB	

White Balance	2000 K to 10,000 K

 $1. \ Unless otherwise stated, test conditions are: F1.6; shutter = NTSC 1/60s, PAL 1/50s; max AGC; no bubble. Clear bubble adds 0.09 f-stop loss (90% light transmission). Tinted bubble adds 0.47 f-stop loss (60% light transmission). Tinted bubble adds 0.47 f-stop loss (60% light transmission). Tinted bubble adds 0.47 f-stop loss (60% light transmission). Tinted bubble adds 0.47 f-stop loss (60% light transmission). Tinted bubble adds 0.47 f-stop loss (60% light transmission).$ 

## Camera 28x Day/Night

Imager	1/4 intype Exview HAD CCD (progressive scan)
Effective Picture Elements	PAL: Approx. 440,000; 752(H) x 582(V) NTSC: Approx. 380,000; 768 (H) x 494 (V)
Lens	28x Zoom (3.5-98.0 mm) F1.35 to F3.7

Zoom Movement Speed	NTSC	PAL
Optical WIDE / Optical TELE – Focus Tracking ON	2.5 sec.	2.5 sec
Optical WIDE / Optical TELE – Focus Tracking OFF	1.7 sec.	1.7 sec.
Optical WIDE / Digital TELE – Focus Tracking ON	4.5 sec.	4.9 sec.
Optical WIDE / Digital TELE – Focus Tracking OFF	1.7 sec.	1.7 sec.
Digital WIDE / Digital TELE	2.0 sec.	2.5 sec.

Focus	Automatic with manual override	
Iris	Automatic with manual override	
Optical Zoom Field of View	2.1° to 55.8°	
Gain Control	Auto/Manual/Max. (-3 dB to 28 dB, 2 dB steps)	
Synchronization	Line-Lock (–120° to 120° vertical phase adjust) or internal crystal	
Aperture Correction	Horizontal and vertical	
Digital Zoom	12x	

Sensitivity (typical) <sup>2</sup>	30 IRE	50 IRE
Day Mode		
SensUp Off	0.33 lux (0.031 fc)	0.66 lux (0.061)
SensUp On (NTSC: 1/4s, 15X; PAL 1/3s, 16.7X)	0.02 lux (.002 fc)	0.04 lux (.004 fc)
Night Mode		
SensUp Off	0.066 lux (0.006 fc)	0.166 lux

16.7X)	SensUp On (NTSC: 1/4s, 15X; PAL 1/3s, 16.7X)	0.0026 lux	0.0082 lux	
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Electronic Shutter Speed	1/1 to 1/10,000 sec., 22 steps
Wide Dynamic Range (WDR)	92 dB (50 dB with WDR Off)
Signal-to-Noise Ratio	>50 dB
White Balance	2000 K to 10,000 K

 $2. \ Unless otherwise stated, test conditions are: F1.6; shutter = NTSC 1/60s, PAL 1/50s; max AGC; no bubble. Clear bubble adds 0.09 f-stop loss (90% light transmission). Tinted bubble adds 0.47 f-stop loss (60% light transmission).$ 

## Mechanical

	In-Ceiling	Pendant
Pan Range	360° cont.	360° cont.
Tilt Angle	1° above horizon	18° above horizon
Variable Speed	0.1°/s-120°/s	0.1°/s-120°/s
Pre-position Speed	Pan: 360°/s Tilt: 100°/s	Pan: 360°/s Tilt: 100°/s
Preset Accuracy	± 0.1° typ.	± 0.1° typ.

## **Electrical**

	In-Ceiling	Pendant
Input Voltage	21-30 VAC 50/60 Hz	21-30 VAC 50/60 Hz
Power Consumption, typical	24 W / 44 VA	60 W / 69 VA or 24 W / 44 VA <sup>3</sup>

 $3. \ Without heater connected in power supply box for indoor applications.$ 

## **Surge Suppression**

Protection on Video	Peak current 10 kA (Gas Tube Arrester)
Protection on Biphase	Peak current 10 A, peak power 300 W (8/20 µs)
Protection on RS-232/485	ESD protection ±15 KV human body model
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 Outputs	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	Peak current 21.4 A, peak power 1500 W (10/1000 $\mu$ s)		Full Dup			uplex or Half Duplex Electrical Port uplex Optical Port	
Supply)		Compatibl	Compatible Receiver CNFE2		FE2M	2MC	
10/100 Ethernet Peak current 14 A, peak power 200 W Data Lines (8/20 μs)		Installation	VG4		4-A-P	inside a VG4-A-PA0, V A2, VG4-A-PSU1, or a apply box with supplied	VG4-A-PSU2
Software Control					dware		rmounting
Camera Setup/Control	Via Internet Explorer Web browser version 7.0 or later, Bosch Configuration Manager	5. Kit available se	parately and must	t be installed	inside the	e AutoDome power supply box.	
	or BVMS	SFP Modu	les				
Software Update	Firmware upload	Descriptio	n			changeable modules a	
Network			r	-		MMF or SMF optical file	oer.
Standards	H.264 (ISO/IEC 14496-10), M-JPEG, JPEG	Data Inter	ace		Ethe		
Streaming	A total of four (4) independent streams: • Two (2) individually configurable H.	Data Rate	Data Rate			.00 Mbps 802.3 Compliant	
	<ul><li>264 streams at 4CIF/D1 resolution,</li><li>One (1) H.264, I-frame only stream</li></ul>	Mechanica	<b>l</b>				
	<ul><li>(suitable for recording)</li><li>One (1) M-JPEG stream at 4CIF/D1</li></ul>	Dimension	ns (LxWxH)				
	resolution	• SF	• SFP-2 and SFP-3 5		55.5	55.5 x 13.5 x 8.5 mm (2.2 x 0.5 x 0.3 in.)	
GOP Structure	IP, IBP, IBBP	• SF	• SFP-25, SFP-26 63		63.8	63.8 x 13.5 x 8.5 mm (2.5 x 0.5 x 0.3 in.)	
Data Rate	9.6 kbps to 6 Mbps	Weight (al	Weight (all SFP modules) 0.		0.23	kg (.05 lb)	
Overall IP Delay	240 ms		Type Connec		nec	Wavelength	Max.
Resolution (Horizontal x	Vertical, PAL/NTSC)		tor			(transmit/receive)	Distance
• 4CIF/D1	704 x 576/480 (50/60 ips <sup>4</sup> )	SFP-2	MMF Duplex LC		ex	1310 nm / 1310 nm	2 km (1.2 miles)
• CIF	352 x 288/240 (50/60 ips <sup>4</sup> )	SFP-3	SMF Duplex		ex	1310 nm /	20 km
	4. Depending on picture content and movement		LC			1310 nm	(12.4 miles)
Ethernet	10-Base T/100 Base-TX, auto-sensing, half/full duplex, RJ45	SFP-25	MMF Single SC		le	1310 nm / 1550 nm	2 km (1.2 miles)
Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, HTTPS, FTP, DHCP, IGMP V2/V3, ICMP, ARP, SMTP,	SFP-26 MMF Single 1550 nm / 2 km SC 1310 nm (1.2 m			2 km (1.2 miles)		
	SNTP, SNMP v3, RTSP, 802.1x, iSCSI, DynDNS, UPnP, IP v4/6, QoS, SSH, SSL						
Audio		Optical Fiber Compatibility, 50/125 µm MMF. For 50/125 fiber, subtract 4 dB from the specified from the spec					
• Standard	G.711, 8 kHz sampling rate L16, 16 kHz sampling rate		optical budget value. Must mee exceed fiber standard ITU-T G.6		ust meet or		
• Signal-to- Noise Ratio	>50 dB	Optical Fib			3−10/125 µm SMF. Mexceed fiber standard l		
Audio     Streaming	Full Duplex / Half Duplex	Optical Distance Specifications Specifications Specifications Specifications Specified transmission distances limited to the optical loss of the fi and any additional loss introduce		ss of the fiber			
Fiber Optic Kit					C	connectors, splices, an	d patch panels.
VG4-SFPSCKT		The modules are designed to ope over the entire optical loss budge range, so they do not require a		oss budget			
Description	Fiber Optic Ethernet Media Converter kit <sup>5</sup> . Requires a small form-factor pluggable (SFP)					ange, so they do not re ninimum loss in order t	
	module (sold separately).	Miscella	aneous				
Data Interface	Ethernet	Sectors/Ti	Sectors/Titling 16 independent sectors with a 20-char title/sector		20-character		
Data Rate	10/100 Mbps IEEE 802.3 Compliant	Masking			vacy masks		

Pre-positions	99, each with a 20-character title
Guard Tours	Two (2) types of tours:  • Recorded tours – two (2), total duration 15 minutes  • Preset tour – one (1), consisting of up to 99 scenes, consecutively
Supported Languages	English, Chinese, Dutch, French, German, Italian, Japanese, Polish, Portuguese, and Spanish

## **User Connections**

Power, Camera	21-30 VAC, 50/60 Hz
Power, Heater	21-30 VAC, 50/60 Hz
Video and Control	RJ-45 100 Base-TX Ethernet
Alarm Inputs (2)	Programmable for "normally open" or "normally closed"
Open Collector Output (1)	32 VDC @ 150 ma max.
Audio Input Line Level (one way audio)	
Input Voltage	5.5 Vp-p max
Impedance	9 Kohm typical

## **Environmental**

	In-Ceiling	Pendant
Design Rating	IP54 <sup>6</sup> , Plenum rated	IP668
Operating Temp.	−10°C to 40°C (14°F to 104°F)	-40°C to 50°C (-40°F to 122°F) or -10°C to 40°C (14°F to 104°F) <sup>7</sup>
Storage Temp.	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)
Humidity	0% to 90% relative, non-condensing	0% to 100% relative, condensing

<sup>6.</sup> With optional VGA-IP54K-IC78 kit.

## Construction

Dimensions	See dimensional drawings
Weight	
• In-ceiling	2.66 kg (5.86 lb)
Indoor Pendant	2.88 kg (6.3 lb)
Outdoor Pendant	3.32 kg (7.3 lb)
Bubble Size	153.1 mm diameter (6.03 in.)

Construction Material	
<ul> <li>Housing</li> </ul>	Cast aluminum
• Bubble	Pendant: Acrylic (high-resolution) In-ceiling: Polycarbonate (rugged)
Standard Color	White (RAL 9003)
Standard Finish	Powder coated, sand finish

## Mounts/Accessories

Mounts/Accessories			
Bubbles			
In-ceiling			
Clear rugged polycarbonate	VGA-BUBBLE-CCLR		
Tinted rugged polycarbonate	VGA-BUBBLE-CTIR		
Pendant			
Clear rugged polycarbonate	VGA-BUBBLE-PCLR		
Tinted rugged polycarbonate	VGA-BUBBLE-PTIR		
Clear high-resolution acrylic	VGA-BUBBLE-PCLA		
Tinted high-resolution acrylic	VGA-BUBBLE-PTIA		
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		
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	VJR-A3-SP		
Gasket kit for IP54 certification	VGA-IP54K-IC78		
Power Supplies			

Outdoor Power Supply Box, no transformer

VG4-A-PSU0

 $<sup>7. \, \</sup>text{Without heater connected in power supply box for indoor applications.}$ 

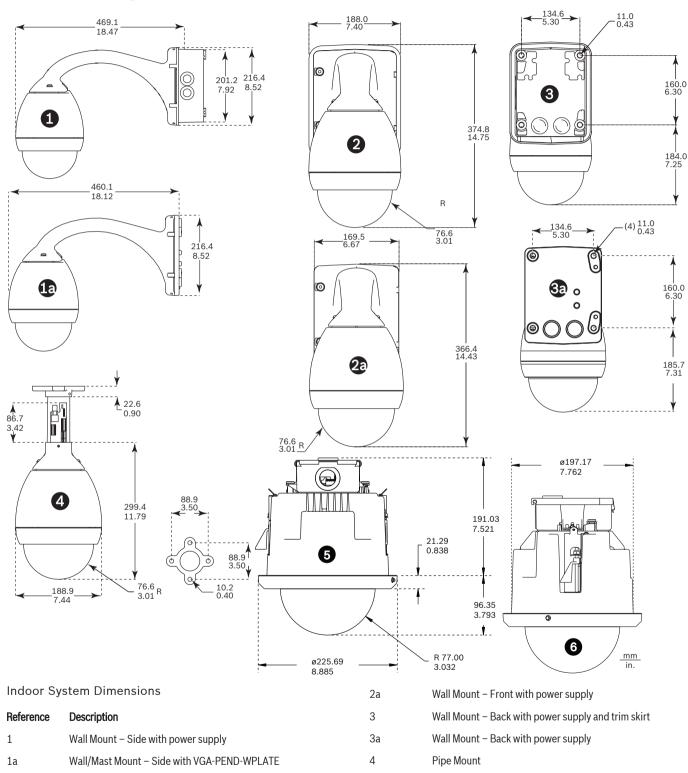
<sup>8.</sup> Meets requirements for NEMA 4X certification with use of a polycarbonate bubble. Meets requirements for NEMA 4X, except impact test, with use of an acrylic bubble.

2

Wall Mount - Front with power supply and trim skirt

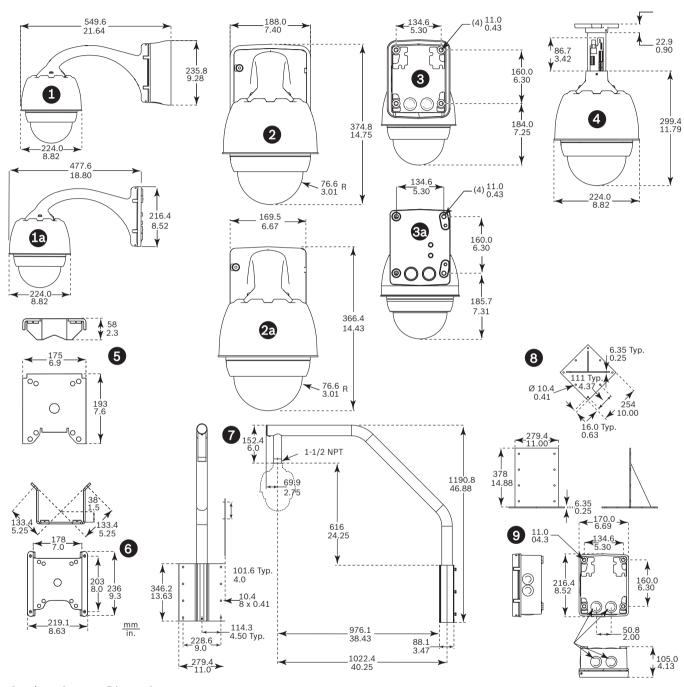
Outdoor Power Supply Box (120/230 VAC Transformer)	VG4-A-PSU1 / VG4-A-PSU2
Fiber Optic Kit	VG4-SFPSCKT

## **Dimensions: In-ceiling and Pendant without Sunshield**



- 5 In-ceiling Mount Front
- 6 In-ceiling Mount Side

## **Dimensions: Pendant with Sunshield and Outdoor Mounts**



3

Outdoor	System	Dimensions
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Reference	Description
1	Wall Mount – Side with power supply and trim skirt
1a	Wall/Mast Mount – Side with VGA-PEND-WPLATE
2	Wall Mount – Front with power supply and trim skirt
2a	Wall Mount – Front with power supply

Wall Mount - Back with power supply and trim skirt

3a	Wall Mount – Back with power supply
4	Pipe Mount
5	Mast Mount
6	Corner Mount
7	Roof Mount

8 Roof Mount Adapter

9 Power Supply for Pipe and Roof Mounts

## **Ordering Information**

## VG5-713-CCE2 AutoDome 700 Series 28x PAL IP In-ceiling Camera

IP 28x PAL camera with IVA, in-ceiling housing with a clear polycarbonate bubble Order number VG5-713-CCE2

## VG5-723-CCE2 AutoDome 700 Series 28x NTSC IP Inceiling Camera

IP 28x NTSC camera with IVA, in-ceiling housing with a clear polycarbonate bubble Order number VG5-723-CCE2

## VG5-713-ECE2 AutoDome 700 Series 28x PAL IP Pendant Camera

IP 28x PAL camera with IVA, pendant housing with a clear acrylic bubble

Order number VG5-713-ECE2

## VG5-714-ECE2 AutoDome 700 Series 36x PAL IP Pendant Camera

IP 36x PAL camera with IVA, pendant housing with a clear acrylic bubble

Order number VG5-714-ECE2

## VG5-723-ECE2 AutoDome 700 Series 28x NTSC IP Pendant Camera

IP 28x NTSC camera with IVA, pendant housing with a clear acrylic bubble

Order number VG5-723-ECE2

## VG5-724-ECE2 AutoDome 700 Series 36x NTSC IP Pendant Camera

IP 36x NTSC camera with IVA, pendant housing with a clear acrylic bubble

Order number VG5-724-ECE2

#### Accessories

### VG4-A-PA0 Pendant Arm Mount

Pendant arm mount with power supply box for a AutoDome Series cameras, 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 AutoDome Series cameras 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 AutoDome Series cameras 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 a for an AutoDome Series pendant arm or a VEI-30 or NEI-30 Dinion Infrared 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 Series pendant arm or a VEI-30 or NEI-30 Dinion Infrared 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-IP54K-IC78 IP54 In-ceiling Gasket Kit for AutoDome 700/800 Series

Gasket kit for AutoDome 700 and 800 Series In-ceiling mounts required for IP54 environmental rating Order number VGA-IP54K-IC78

## VJR-A3-SP In-ceiling Support Kit for AutoDome 700/800 Series and AutoDome Junior HD

Suspended ceiling support kit for AutoDome 700 and 800 Series and AutoDome Junior HD In-ceiling mounts Order number **VJR-A3-SP** 

## VG4-A-PSU0 24 VAC Power Supply Unit

24 VAC, 100 W, white, for an AutoDome Series camera Order number **VG4-A-PSU0** 

## VG4-A-PSU1 120 VAC Power Supply Unit

120 VAC, 100 W, white, for an AutoDome Series camera

Order number VG4-A-PSU1

## VG4-A-PSU2 230 VAC Power Supply Unit

230 VAC, 100 W, white, for an AutoDome Series camera

Order number VG4-A-PSU2

#### VGA-SBOX-COVER Cover for AutoDome Power Supply **Boxes**

Order number VGA-SBOX-COVER

#### VG4-SFPSCKT Fiber Optic Ethernet Media Converter Kit

Ethernet media converter video transmitter/data receiver fiber optic kit

Order number VG4-SFPSCKT

## VG4-A-TSKIRT Trim Skirt for AutoDome Power Supply

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-CCLR Clear Rugged Bubble for an In-ceiling Housing

Impact resistant polycarbonate bubble

Order number VGA-BUBBLE-CCLR

## VGA-BUBBLE-CTIR Tinted Rugged Bubble for an In-ceiling Housing

Impact resistant polycarbonate bubble Order number VGA-BUBBLE-CTIR

## VGA-BUBBLE-PCLR Clear Rugged Bubble for a Pendant

Impact resistant polycarbonate bubble Order number VGA-BUBBLE-PCLR

## VGA-BUBBLE-PTIR Tinted Rugged Bubble for a Pendant Housing

Impact resistant polycarbonate bubble Order number VGA-BUBBLE-PTIR

#### **Software Options**

## MVS-FENC-AES BVIP AES 128 Bit Encryption

BVIP AES 128-bit encryption site license. This license is required only once per installation. It enables encrypted communication between BVIP devices and management stations.

Order number MVS-FENC-AES

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