AutoDome 100 Series Analog Fixed Camera

www.boschsecurity.com

▶ 540 TVL fixed dome series

▶ Color and day/night camera options

▶ Available with 2.7–13.5 mm or 5–50 mm lens

▶ Coax/UTP transmission standard on all models

▶ Convertible to IP communications with optional accessory

The AutoDome 100 Series is an easy to install fixed camera that delivers superb video in all indoor and outdoor applications. The camera features day/night functionality for high quality images in low light conditions. This discrete dome camera has an IP66 rating ensuring reliable uncompromised functionality even in dusty and potentially wet environments.
By using the same housing components, all AutoDome installations have a consistent look, and observers have no idea which type of camera (if any) is watching over them.

100 Series highlights
The AutoDome 100 Series combines the same high-quality housings used by AutoDome PTZ cameras with the award-winning imaging technology of Dinion high-resolution color or day/night fixed cameras and varifo-cal lenses.

The AutoDome 100 Series supports a variety of standard and optional video and data transmission methods, including Bilinx (over coax and UTP) and fiber. Remote control, configuration, and firmware updates can also be performed over these cables, offering you unparalleled control of your cameras.

The AutoDome 100 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 100 Series is simple to install and use. The in-ceiling and pendant housings come fully assembled. The pendant housings are ready for wall or pipe applications with the proper mounting hardware (purchased separately). Also available for pendants, are corner, mast, and roof mounting kits which allow the AutoDome 100 Series to be easily adapted to the individual site requirements.

Functions

The following are some of the features that make the AutoDome 100 Series the most flexible fixed dome camera in the security industry.

High-performance camera features
AutoDome 100 Series cameras have a 1/3-inch color or day/night CCD with Bosch's unique 15-bit Dinion digital imaging technology to deliver a 32-fold sensitivity improvement and a full 540 horizontal lines of resolu-

tion. In addition, AutoDome 100 Series cameras incorporate a number of features not found in other fixed dome cameras.

These include:

- XF-Dynamic – Extends the camera's dynamic range to deliver sharper, more detailed images and outstanding color reproduction accuracy.
- NightSense – Automatically activated under low-light conditions to extend the 100 Series' exceptional sensitivity by a factor of three during monochrome operation.
- SensUp – Increases integration time by a factor of 10 to dramatically enhance sensitivity.
- Back Light Compensation (BLC) – A fully programmable backlight compensation (BLC) area of interest and variable BLC level let AutoDome 100 Series day/ night cameras overcome even the most challenging entrance, vestibule, and lobby applications.
- Auto Black – Enhances contrast by compensating for reduced contrast due to fog, mist, or glare.
- Default Shutter – Automatically adjusts to the lens opening at fast shutter speeds, eliminating motion blur and providing remarkably clear and detailed images of fast-moving objects.

AutoDome 100 Series day/night versions automatically switch from color to monochrome by removing a mechanically switching IR filter in low-light conditions. This boosts the infrared illumination sensitivity while maintaining superior image quality.

Unsurpassed reliability

All housings feature recessed screws and latches for increased tamper resistance.

AutoDome pendant housings (indoor and outdoor) are rated to provide IP 66 protection. In addition, the pendant housings come equipped with a low-impact, high-resolution acrylic bubble for enhanced image clarity. Outdoor Pendant housings provide an operating temperature range down to -40°C (-40°F). AutoDome in-ceiling housings provide IP54 (with optional kit) protection and are rated IK 8 (IEC 62262). These housings feature an impact-resistant 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).

Ease of installation and servicing

Bosch's innovative software, the Configuration Tool for Imaging Devices (CTFID), allows operators or technicians to change camera settings, and even update firmware from virtually anywhere without need for additional wiring.

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-IC kit), Plenum rated
• Pendant	IP66, NEMA 4X
Impact Resistance	In-ceiling: IK 8

Parts Included

In-ceiling

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

Indoor Pendant

1	Fully-assembled indoor pendant housing
1	Acrylic bubble, tinted

Outdoor Pendant

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

Note: Mounting hardware and accessories are available separately.

Technical Specifications

Camera 2.7 mm-13.5 mm Color

Imager	1/3 in. Interline CCD	
	(752 x 582 PAL)/(768 x 492 NTSC)	
Lens		
Iris	Automatic	
Field of View	78.3° to 18.5°	
Video Output	1.0 Vp-p, 75 Ohm	
Gain Control	Off/Auto (with adjustable limit) /manual	
Synchronization	Line-Lock (0° to 358° vertical phase adjust) or internal crystal	
Aperture Correction	Horizontal and vertical	
Horizontal Resolution	540 TVL (NTSC, PAL) typical	
Sensitivity (typical)	**30 IRE**	**50 IRE**
SensUp Off	0.29 lx	0.9 lx
SensUp On (15x)	0.029 lx	0.09 lx

SNR	>50 dB
White Balance	2500 K to 9000 K (with AWB hold mode and manual mode)

Camera 2.7 mm–13.5 mm Day/Night

Imager	1/3 in. Interline CCD
	(752 x 582 PAL)/(768 x 492 NTSC)
Lens	
Iris	Automatic
Field of View	78.3° to 18.5°
Video Output	1.0 Vp-p, 75 Ohm
Gain Control	Off/Auto (with adjustable limit) /manual
Synchronization	Line-Lock (0° to 358° vertical phase adjust) or internal crystal
Aperture Correction	Horizontal and vertical
Horizontal Resolution	540 TVL (NTSC, PAL) typical

Sensitivity (typical)	30 IRE	50 IRE
Day Mode		
SensUp Off	0.29 lx	0.9 lx
SensUp On (15x)	0.029 lx	0.09 lx
Night Mode		
SensUp Off	0.12 lx	0.36 lx
SensUp On (15x)	0.012 lx	0.09 lx

SNR	>50 dB
White Balance	2500 K to 9000 K (with AWB hold mode and manual mode)

Camera 5 mm–50 mm Color

Imager	1/3 in. Interline CCD
	(752 x 582 PAL)/(768 x 492 NTSC)
Lens	
Iris	Automatic
Field of View	47.5° to 5.0°
Video Output	1.0 Vp-p, 75 Ohm
Gain Control	Off/Auto (with adjustable limit) /manual
Synchronization	Line-Lock (0° to 358° vertical phase adjust) or internal crystal
Aperture Correction	Horizontal and vertical
Horizontal Resolution	540 TVL (NTSC, PAL) typical

Sensitivity (typical)	30 IRE	50 IRE
SensUp Off	0.42 lx	1.3 lx
SensUp On (15x)	0.042 lx	0.13 lx

SNR	>50 dB
White Balance	2500 K to 9000 K (with AWB hold mode and manual mode)

Camera 5 mm–50 mm Day/Night

Imager	1/3 in. Interline CCD
	(752 x 582 PAL)/(768 x 492 NTSC)
Lens	
Iris	Automatic
Field of View	47.5° to 5.0°
Video Output	1.0 Vp-p, 75 Ohm
Gain Control	Off/Auto (with adjustable limit) /manual
Synchronization	Line-Lock (0° to 358° vertical phase adjust) or internal crystal
Aperture Correction	Horizontal and vertical
Horizontal Resolution	540 TVL (NTSC, PAL) typical

Sensitivity (typical)	30 IRE	50 IRE
Day Mode		
SensUp Off	0.42 lx	1.3 lx
SensUp On (15x)	0.042 lx	0.13 lx
Night Mode		
SensUp Off	0.17 lx	0.52 lx
SensUp On (15x)	0.017 lx	0.052 lx

SNR	>50 dB
White Balance	2500 K to 9000 K (with AWB hold mode and manual mode)

Electrical

	In-ceiling	Indoor Pendant	Outdoor Pendant
Power	21-30 VAC 50/60 Hz	21-30 VAC 50/60 Hz	21-30 VAC 50/60 Hz
Power Draw: (typ)	7.5 W / 14 VA	7.5 W / 14 VA	43.5 W / 47 VA

Surge Suppression

Protection on Video	Peak current 10 kA (Gas Tube Arrester), peak power 1000 W (10/1000 μ)
Protection on Power Input (Dome)	Peak current 7.3 A, peak power 600 W (10/1000 μ)
Protection on Power Output (Arm Power Supply)	Peak current 21.4 A, peak power 1500 W (10/1000 μ)

Miscellaneous

Communications Protocols	Bilinx
Supported Languages	English, Czech, Dutch, French, German, Italian, Polish, Portuguese, Russian and Spanish

User Connections

Power, Camera	21-30 VAC, 50/60 Hz
Power, Heater	21-30 VAC, 50/60 Hz
Video and Data	BNC/UTP

Environmental

	In-ceiling	Indoor Pendant	Outdoor Pendant
Operating Temp.	−10℃ to 50℃ (14℉ to 122℉)	−10℃ to 50℃ (14℉ to 122℉)	−40℃ to 50℃ (−40℉ to 122℉)
Storage Temp.	−40℃ to 60℃ (−40℉ to 140℉)	−40℃ to 60℃ (−40℉ to 140℉)	−40℃ to 60℃ (−40℉ to 140℉)
Humidity	0% to 90% relative, non-condensing	0% to 90% relative, non-condensing	0% to 100% relative, condensing

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	
• Housing	Cast aluminum
• Bubble	Pendant: Acrylic (high-resolution) In-ceiling: Polycarbonate (rugged)
Standard Color	White (RAL9003)
Standard Finish	Powder coated, sand finish

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 AutoDome 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	VGA-IC-SP
Gasket kit for IP54 certification	VGA-IP54K-IC

Power Supplies

| 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	VGA-FIBER-AN

Dimensions: Indoor AutoDomes
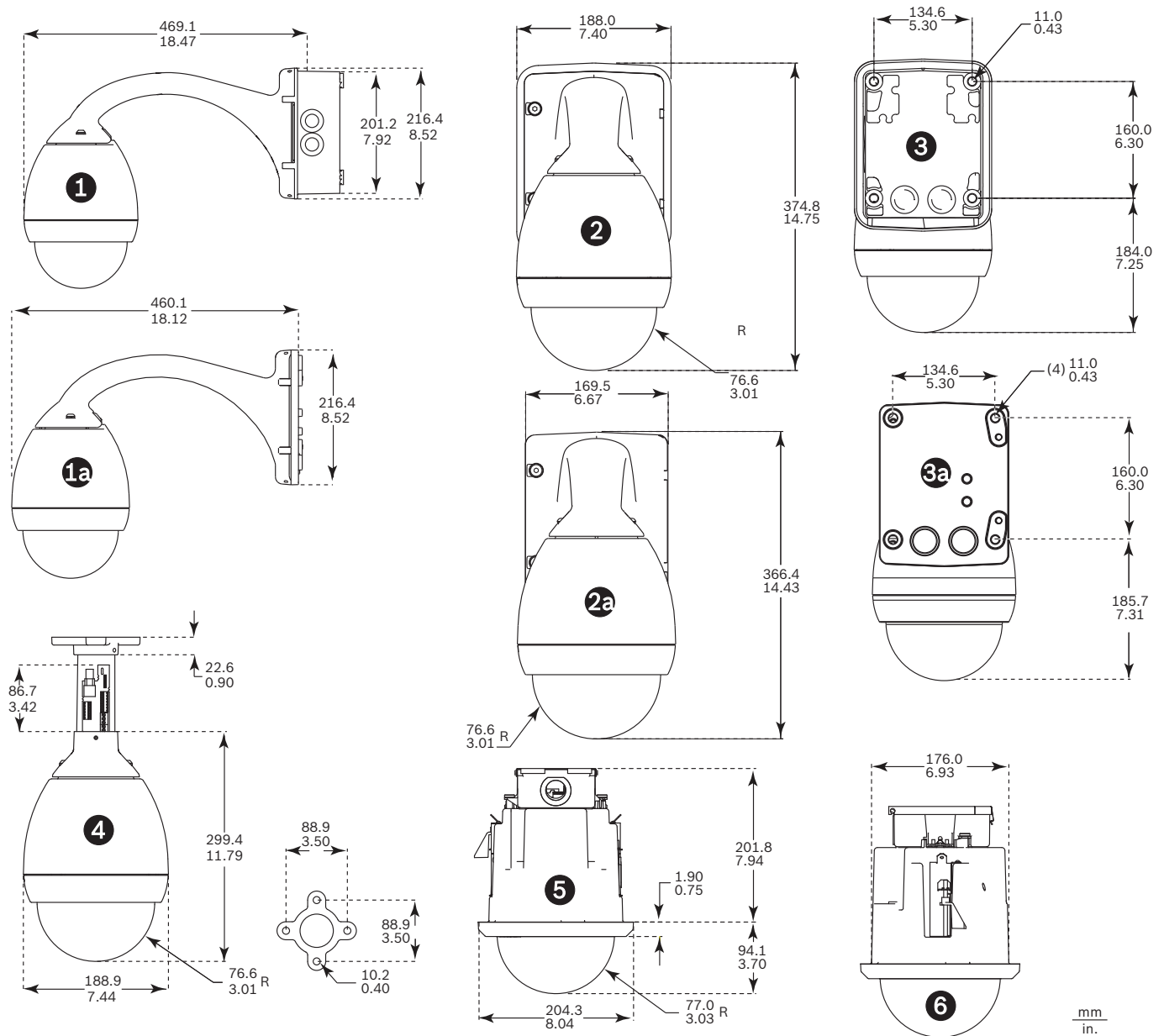
Indoor System Dimensions

Reference	Description
1	Wall Mount – Side with power supply
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
3	Wall Mount – Back with power supply and trim skirt
3a	Wall Mount – Back with power supply
4	Pipe Mount
5	In-ceiling Mount – Front
6	In-ceiling Mount – Side

Dimensions: Outdoor AutoDomes
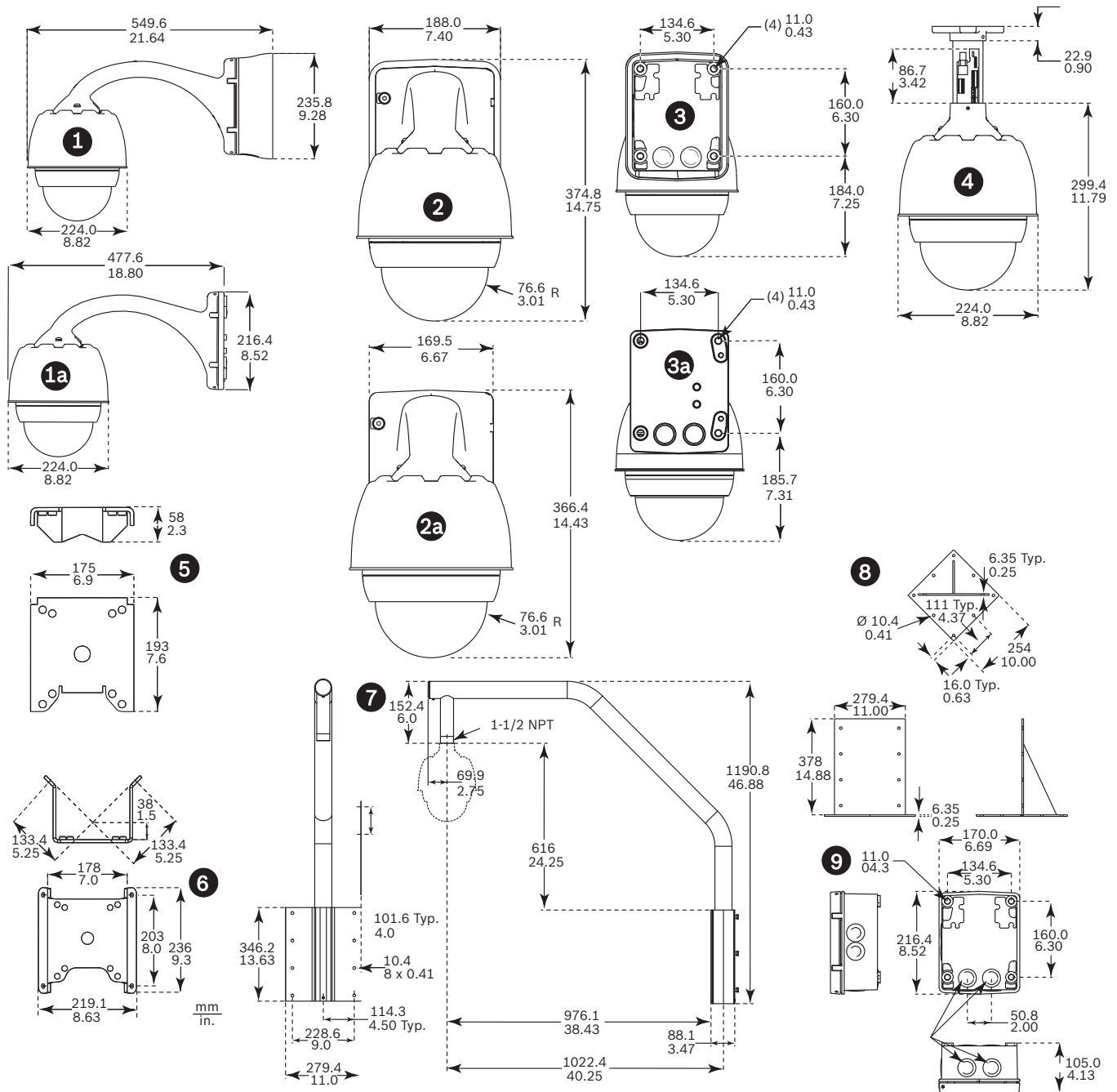
Outdoor System Dimensions

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
3	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

VG5-161-CT0 AutoDome 100 Series Color NTSC In-ceiling Camera
Analog 1/3-inch 2.7-13.5 mm color CCD NTSC camera, in-ceiling housing with a tinted polycarbonate bubble
Order number **VG5-161-CT0**

VG5-162-CT0 AutoDome 100 Series Day/Night NTSC In-ceiling Camera
Analog 1/3-inch 2.7-13.5 mm day/night CCD NTSC camera, in-ceiling housing with a tinted polycarbonate bubble
Order number **VG5-162-CT0**

VG5-163-CT0 AutoDome 100 Series Color NTSC In-ceiling Camera
Analog 1/3-inch 5-50 mm color CCD NTSC camera, in-ceiling housing with a tinted polycarbonate bubble
Order number **VG5-163-CT0**

VG5-164-CT0 AutoDome 100 Series Day/Night NTSC In-ceiling Camera
Analog 1/3-inch 5-50 mm day/night CCD NTSC camera, in-ceiling housing with a tinted polycarbonate bubble
Order number **VG5-164-CT0**

VG5-161-PT0 AutoDome 100 Series Color NTSC Indoor Pendant Camera
Analog 1/3-inch 2.7-13.5 mm color CCD NTSC camera, indoor pendant housing with a tinted acrylic bubble
Order number **VG5-161-PT0**

VG5-162-PT0 AutoDome 100 Series Day/Night NTSC Indoor Pendant Camera
Analog 1/3-inch 2.7-13.5 mm day/night CCD NTSC camera, indoor pendant housing with a tinted acrylic bubble
Order number **VG5-162-PT0**

VG5-163-PT0 AutoDome 100 Series Color NTSC Indoor Pendant Camera
Analog 1/3-inch 5-50 mm color CCD NTSC camera, indoor pendant housing with a tinted acrylic bubble
Order number **VG5-163-PT0**

VG5-164-PT0 AutoDome 100 Series Day/Night NTSC Indoor Pendant Camera
Analog 1/3-inch 5-50 mm day/night CCD NTSC camera, indoor pendant housing with a tinted acrylic bubble
Order number **VG5-164-PT0**

VG5-164-EC0 AutoDome 100 Series Day/Night NTSC Outdoor Pendant Camera
Analog 1/3-inch 5-50 mm day/night CCD NTSC camera, outdoor pendant housing with a clear acrylic bubble
Order number **VG5-164-EC0**

Accessories

VG4-A-PA0 Pendant Arm Mount
Pendant arm mount with power supply box for a Auto-Dome 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 Auto-Dome 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 Auto-Dome 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-IC IP54 In-ceiling Gasket Kit for AutoDome 100/600 Series
Gasket kit for AutoDome 100 and 600 Series Auto-Dome In-ceiling mounts required for IP54 environmental rating
Order number **VGA-IP54K-IC**

VGA-IC-SP In-ceiling Support Kit for AutoDome 100/600 Series
Suspended ceiling support kit for AutoDome 100 and 600 Series AutoDome In-ceiling mounts
Order number **VGA-IC-SP**

VG4-A-PSU0 24 VAC Power Supply Unit
24 VAC, 100 W, NEMA-rated, white, for an AutoDome
Series camera
Order number **VG4-A-PSU0**

VG4-A-PSU1 120 VAC Power Supply Unit
120 VAC, 100 W, NEMA-rated, white, for an AutoDome
Series camera
Order number **VG4-A-PSU1**

VG4-A-PSU2 230 VAC Power Supply Unit
230 VAC, 100 W, NEMA-rated, 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**

VGA-FIBER-AN Analog Multimode Fiber Optic Kit
Analog multimode video transmitter/data receiver fiber
optic kit
Order number **VGA-FIBER-AN**

**VG4-A-TSKIRT Trim Skirt for AutoDome Power Supply
Boxes**
Trim skirt for the following AutoDome Series power
supply boxes:
VG4-A-PSU0F, VG4-A-PSU1, VG4-A-PSU1F, VG4-A-
PSU2, VG4-A-PSU2F,
VG4-SBOX-24VAC, VG4-SBOX-120VAC, and VG4-
SBOX-230VAC
Order number **VG4-A-TSKIRT**

**VGA-BUBBLE-CCLR Clear Rugged Bubble for an In-ceil-
ing Housing**
Impact resistant polycarbonate bubble
Order number **VGA-BUBBLE-CCLR**

**VGA-BUBBLE-CTIR Tinted Rugged Bubble for an In-ceil-
ing Housing**
Impact resistant polycarbonate bubble
Order number **VGA-BUBBLE-CTIR**

**VGA-BUBBLE-PCLR Clear Rugged Bubble for a Pendant
Housing**
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**

**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**

**VG4-MTRN-E1 AutoDome TCP/IP Communications Mod-
ule**
H.264 TCP/IP (Ethernet) communications module for
AutoDome 100, 200, 300 and 500i Series products
Order number **VG4-MTRN-E1**

Software Options

VP-CFGSFT Configuration Tool for Imaging Devices
Camera configuration software for use with Bilinx cam-
eras
Order number **VP-CFGSFT**