

AutoDome Reference Guide



Security Systems



Security you can rely on.

BOSCH



Contents

- 02** Introduction
- 03-04** Options to Explore
- 05-06** Choosing the Right AutoDome
- 07-08** How to Order
- 09-10** Optional Accessories
- 11-16** AutoDome System Components
- 17-20** System Dimensions
- 21-23** System Configurations
- 23-24** Glossary of Terms
- 25** The Bosch Advantage

AutoDome



Since the development of integrated high-speed dome, pan/tilt cameras almost a decade ago, AutoDome has been synonymous with innovation, superior performance and reliability.

Bosch AutoDome systems are designed to meet the needs of your security application. They easily integrate with our entire security product line, including Divar digital recorders and Allegiant matrix switchers.



Bilinx is the newest CCTV technology innovation from Bosch. Bilinx is a bi-directional communication capability embedded in the video signal of your AutoDome CCTV cameras. With Bilinx, technicians can check status, change camera settings, control PTZ, and even update firmware from virtually anywhere along the video cable. Bilinx reduces service and installation time, provides for more accurate set-up and adjustment, and improves overall performance. Add the Bilinx technology from Bosch to your business and see how it grows.



Full integration offers you a complete, easy-to-install, low-maintenance CCTV system from a single supplier.

The Bosch commitment to world-class support begins with a three-year warranty and easy access to technical support. Our international sales organizations are committed to meeting your product, service and training needs. More options, better quality, more support – only from Bosch.

Options to Explore

What to consider when choosing your AutoDome

In order to select the right AutoDome for your application, there are a number of factors to consider, including lighting conditions, mounting locations and visibility. These will dictate which features and options are necessary and which camera you should choose. The following explanations cover the major options available in the AutoDome line.

Camera Options

Day/Night

The Day/Night camera option offers the best of both worlds, producing high-quality color video during the day or when light levels are high, and then switching to monochrome and removing the infrared filter to improve IR sensitivity at night or when light conditions are low.

Color

Color cameras are the most popular camera choice for standard lighting conditions. Offering high resolution and high sensitivity, these cameras produce excellent color images for all types of security applications.

Monochrome

Since monochrome cameras are more sensitive to infrared radiation, they can be used in lighting conditions too dark for a color camera.

Housing Options

Pendant housings are for indoor or outdoor applications. Suspended in-ceiling housings are for indoor applications only.



Outdoor pendant



Indoor pendant



Indoor suspended in-ceiling

Bubble Options

All AutoDomes are available with either a clear or a tinted bubble. The clear bubble offers maximum sensitivity by allowing as much light through as possible. The tinted bubble offers covertness by making it difficult to see the camera from the outside. In addition to these standard bubble types, there are several other colored bubbles that can be purchased separately. Each offers varying levels of covertness, aesthetics and sensitivity.

We also offer the exclusive rugged bubble to protect your AutoDome camera from vandalism. Designed to meet stringent strength standards without compromising optical clarity, the rugged bubble can withstand impact equivalent to a 4.5 kilograms weight dropped from a height of 3.0 meters).



Clear*

Tint*

Bronze

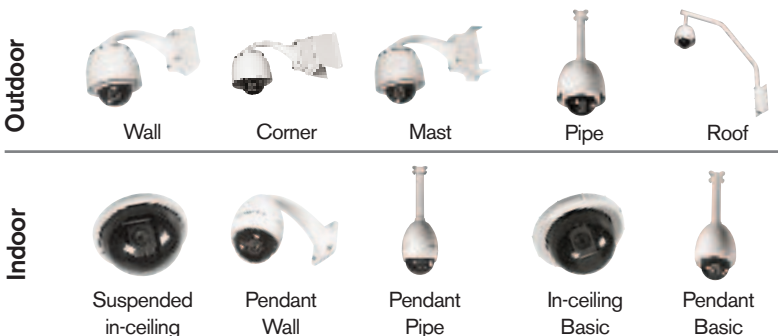
Chrome

Gold

* Available in standard and rugged bubble.

Mounting Options

The following photos show the various mounting options available for indoor and outdoor systems. Mounting choices are specified within the order number for each individual EnviroDome, AutoDome or BasicDome unit.



Fiber Optics

Fiber optics is the preferred transmission medium to bridge long distances in hostile electromagnetic environments such as subways and railways. AutoDome and EnviroDome systems are available with a bi-directional fiber transceiver, which allows both video and control signals to be transmitted over a single fiber.



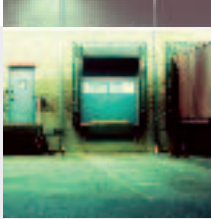
Choosing the Right AutoDome



EnviroDome

Outdoor Systems

Whatever the weather may bring, EnviroDome maintains peak performance, making it the ideal solution for perimeter surveillance, parking lots and other outdoor applications. Day/night cameras provide extra sensitivity under changing light conditions, while high-resolution cameras capture the finest detail. For extreme conditions there is even a pressurized version available.



STANDARD FEATURES

Cameras Available	26x Optical Zoom Day/Night 18x Optical Zoom Day/Night 18x Optical Zoom Color 18x Optical Zoom Monochrome
Digital Zoom	12x
Operating Temperature	- 40° C to 50° C (- 40° F to 122° F)
Privacy Masking	Yes
Slow Shutter	Yes
Guard Tour	Yes
Remote Fast Address	Yes
AutoPivot and AutoScaling	Yes
Pre-Positions	99
Alarm Inputs	Yes
Relay Outputs	Yes
Warranty	3 Year
Multiple protocols communications	Included

AVAILABLE OPTIONS

AutoTrack	Yes
Housings	Pendant
Mounts	Wall, Corner, Mast, Pipe, Roof (Parapet)
Rugged Bubble	Yes
Bubble Color Options	Tint (standard) Clear (standard) Gold - (sold separately) Bronze - (sold separately) Chrome - (sold separately)



AutoDome

Indoor Systems

Inside, nothing beats the AutoDome. It offers all the features you need to monitor everything from schools to offices, shopping malls to casinos and lets you focus on details other cameras are missing. A variety of mounting options lets you place cameras in the most effective locations throughout your building for the most reliable surveillance possible.



BasicDome

Economical Systems

The BasicDome camera is the economical surveillance solution for indoor security applications. It offers faster, quieter and smoother operation than ever before in a dome in this price range. The BasicDome is the perfect choice for those who want the assurance of the Bosch name at an affordable price.

26x Optical Zoom Day/Night
18x Optical Zoom Day/Night
18x Optical Zoom Color
18x Optical Zoom Monochrome

12x

- 10° C to 50° C (14° F to 122° F)

Yes

Yes

Yes

Yes

Yes

99

Yes

Yes

3 Year

Included

16x Optical Zoom Color

No

- 10° C to 50° C (14° F to 122° F)

No

No

Yes

Yes

Yes

99

No

No

3 Year

-

Yes

In-Ceiling, Pendant

Wall, Pipe, In-Ceiling
(EnviroDome mounts can be used but
are sold separately)

Yes

Tint (standard)
Clear (standard)
Gold - (sold separately)
Bronze - (sold separately)
Chrome - (sold separately)

No

In-Ceiling, Pendant

Wall, Pipe, In-Ceiling
(EnviroDome mounts can be used but
are sold separately)

No

Tint (standard)
Clear (sold separately)

How to Order Your AutoDome System

Use the charts on the following pages to create your order numbers based on the examples shown.



EnviroDome

Outdoor Systems

Example: ENV C 230 W T

- EnviroDome
- Color
- 230 VAC 50 Hz
- Wall Mount
- AutoTrack



C	— 18x Color	W	— Wall
D	— 18x Day/Night	M	— Mast (Pole)
E	— 26x Day/Night	C	— Corner
		P	— Pipe

EnviroDome	ENV				
120 VAC, 60 Hz NTSC		120	Standard		
230 VAC, 50 Hz PAL		230	AutoTrack	T	
24 VAC, 60 Hz NTSC ¹		2460	Fiber ²	F	
24 VAC, 50 Hz PAL ¹		2450	Fiber w/ AutoTrack ²	FT	

¹ No transformer included. Customer must supply 24 VAC, 50/60 Hz transformer (ENV-PSU or equivalent). Not available with fiber optic option.

² Fiber option only available in kits with transformers. For kits without transformers, an LTC 4628 may be used with standard ENV kit. Each fiber kit requires an LTC 4629 at the system.



AutoDome

Indoor Systems

Example : G3A C PW 5 T P T

- Indoor AutoDome
- Color
- Pendant White
- 24 VAC 50 Hz
- Tinted
- Pipe Mount
- AutoTrack

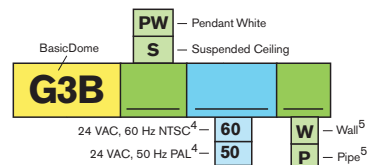
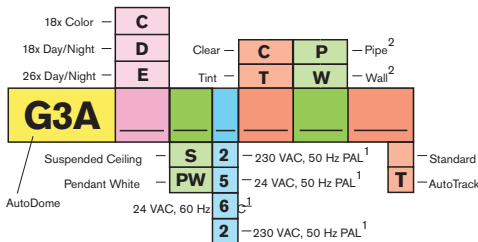


BasicDome

Economical Systems

Example : G3B PW 50 W

- G3 Basic
- Pendant White
- 24 VAC 50 Hz PAL
- Wall Mount



¹ No transformer included. Customer must supply 24 VAC, 50/60 Hz transformer (ENV-PSU or TC 220 PSX-24)

² Wall and pipe mount kits only apply to pendant models.

⁴ No transformer included. Customer must supply 24-28 VAC, 15 W transformer (G3A-PSU or equivalent).

⁵ Wall and pipe mount kits only apply to pendant models.

Optional Accessories

EnviroDome

Outdoor Systems



A. LTC 9230/01

Flat Roof Adapter Plate (for use with LTC 9230 Series Mounts.)



B. Power Supply with Surge Protection

Protects data, video and power lines.

Pendant Arm

No Fiber Optics

ENV-PA1-SP (120 VAC)

ENV-PA2-SP (230 VAC)

"F" with Fiber Optics

ENV-PA1F-SP (120 VAC)

ENV-PA2F-SP (230 VAC)



Stand Alone Box

No Fiber Optics

ENV-PSU1-SP (120 VAC)

ENV-PSU2-SP (230 VAC)

"F" with Fiber Optics

ENV-PSU1F-SP (120 VAC)

ENV-PSU2F-SP (230 VAC)



ENV-BOX

Empty Junction Box

C. ENV-PA-EX

Extended Pendant Arm (27")



D. Bubble Accessories—How to order Bubble Accessories.

Use the following chart to create your order numbers based on the example below.

Example: BUB-G3A PW CL _

- Bubble Replacement
- G3 AutoDome Indoor
- Pendant White
- Clear Bubble
- Standard Replacement



Clear



Tint

	Chrome	CHR		
	Bronze	BRZ		
	Gold	GLD		
	Clear	CL	-R¹	— Rugged
	Tint	TI	-S	— Standard
BUB				
Indoor G3	G3A	PW		— Pendant White ²
EnviroDome	ENV	S		— Suspended Ceiling

For more information visit
www.boschsecuritysystems.com

¹ Rugged versions are available in Clear or Tint only.

² Pendant versions include lower housing.



BasicDome

Economical Systems

A. BUB-G3BTI

Replacement Bubble w/Tinted Window

BUB-G3BCL

Optional Bubble w/Clear Window

G3B-Dummy

G3 Basic Dummy Kit (Dark Bubble and Trim Ring only)

AutoDome

Indoor Systems

A. Power Supply

TC 220 PSX-24
230 VAC / 24 VAC



B. Unity Domes

Also available are Unity Domes, which look exactly like EnviroDomes and AutoDomes, but contain a variety of fixed camera options.



Model	Description
LTC 9349 Series	in ceiling.
LTC 9449 Series	indoor pendant.
LTC 9450 Series	outdoor pendant.

AutoTrack

EnviroDome

ENV - PA2T

Pendant arm + Tracker 230 VAC

ENV - PA2FT

Pendant arm + Tracker + fiber 230 VAC

ENV - PAOT

Pendant arm + Tracker 24 VAC

ENV - PSU2T

Stand Alone Box + Tracker 230 VAC

ENV - PSU2FT

Stand Alone Box + Tracker + Fiber 230 VAC

ENV - PSUOT

Stand Alone Box + Tracker 24 VAC

AutoDome

ENV - PA2T

Pendant arm + Tracker 230 VAC

G3A - TRKR

Indoor Tracker unit

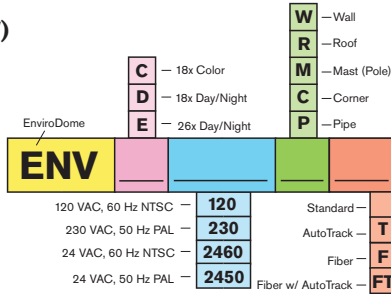
³ No transformer included. Customer must supply 24 VAC, 50/60 Hz transformer (ENV-PSU or equivalent). Not available with fiber optic option.

11 Selecting the correct EnviroDome System?

EnviroDome

Outdoor Assembly (ENV)

A. Camera

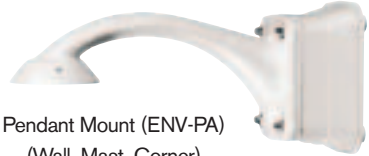


EnviroDome Camera
Assembly

B. Power



Power Supply Unit (ENV-PSU)
(Roof, Pipe)



Pendant Mount (ENV-PA)
(Wall, Mast, Corner)

C. Mount Options



Mast (Pole)

"M" is LTC 9541/01



Corner

"C" is LTC 9542/01



Roof

"R" is LTC 9230/00



Pipe

"P" is LTC 9543/00

HAC-PIPE30	PIPE 30CM FOR LTC9543
HAC-PIPE50	PIPE 50CM FOR LTC9543
HAC-PIPE80	PIPE 80CM FOR LTC9543
HAC-PIPE125	PIPE 125CM FOR LTC9543

What are the components of an EnviroDome System?

AutoTracker + Fibre Version	Fibre Optics Version	AutoTracker Version	Standard Version	LTC 0728/15C	LTC 0828/15C	LTC 0928/15C	LTC 0948/15C	ENV-PA2	ENV-PA2T	ENV-PA2F	ENV-PA2FT	ENV-PA0	ENV-PA0T	ENV-PSU2	ENV-PSU2T	ENV-PSU2F	ENV-PSU2FT	ENV-PSU0T	LTC 9541/01	LTC 9542/01	LTC 9543/01		
				ENVC230WFT	ENVC230WF	ENVC230WT	ENVC230W	●				●	●	●	●								
ENVC230CFT	ENVC230CF	ENVC230CT	ENVC230C	●				●	●	●	●										●		
ENVC230PFT	ENVC230PF	ENVC230PT	ENVC230P	●											●	●	●	●				●	
ENVC230MFT	ENVC230MF	ENVC230MT	ENVC230M	●				●	●	●	●										●		
		ENVC2450WT	ENVC2450W	●									●	●									
		ENVC2450CT	ENVC2450C	●									●	●								●	
		ENVC2450PT	ENVC2450P	●														●					●
		ENVC2450MT	ENVC2450M	●									●	●							●		
ENVD230WFT	ENVD230WF	ENVD230WT	ENVD230W		●			●	●	●	●												
ENVD230CFT	ENVD230CF	ENVD230CT	ENVD230C		●			●	●	●	●										●		
ENVD230PFT	ENVD230PF	ENVD230PT	ENVD230P		●									●	●	●	●					●	
ENVD230MFT	ENVD230MF	ENVD230MT	ENVD230M		●			●	●	●	●										●		
		ENVD2450WT	ENVD2450W		●								●	●									
		ENVD2450CT	ENVD2450C		●								●	●									●
		ENVD2450PT	ENVD2450P		●													●					●
		ENVD2450MT	ENVD2450M		●								●	●							●		
ENVE230WFT	ENVE230WF	ENVE230WT	ENVE230W			●		●	●	●	●												
ENVE230CFT	ENVE230CF	ENVE230CT	ENVE230C			●		●	●	●	●										●		
ENVE230PFT	ENVE230PF	ENVE230PT	ENVE230P			●								●	●	●	●					●	
ENVE230MFT	ENVE230MF	ENVE230MT	ENVE230M			●		●	●	●	●										●		
		ENVE2450WT	ENVE2450W			●							●	●									
		ENVE2450CT	ENVE2450C			●							●	●									●
		ENVE2450PT	ENVE2450P			●												●					●
		ENVE2450MT	ENVE2450M			●							●	●							●		

● Used in Standard versions

● Used in Autotracker versions

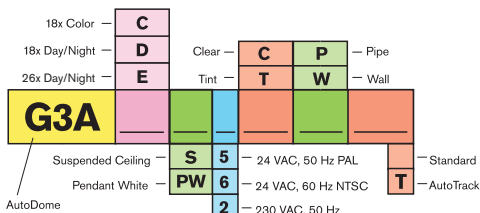
● Used in Fibre Optics versions

● Used in Autotracker + Fibre versions

● Used in all versions

Selecting the correct AutoDome System?

AutoDome Indoor Systems



A. Camera



AutoDome Camera
Assembly (S²)



AutoDome Camera
Assembly (PW¹)

B. Mount Options ¹ (PW) Camera assembly requires (P) or (W)

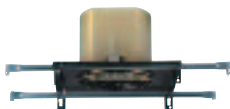


(P) Pipe Mount
LTC 9543/00



(W) Wall Mount
LTC 9540/00

² (S) Camera assembly requires LTC 7490/20C Back Box and either - Tinted Bubble BUB-G3APWTI
- Clear Bubble BUB-G3APWCL



C. AutoTrack

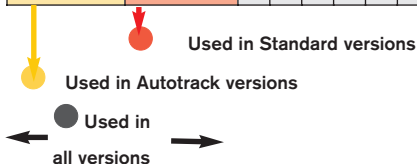
(P) Pipe mount and (S) suspended ceiling Add G3A-TRKR
(W) Wall mount replace LTC 9540/00 with ENV-PA0T



G3A-TRKR

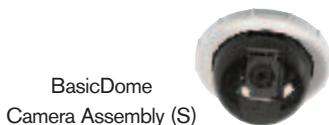
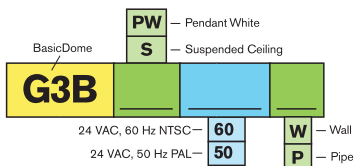
What are the components of an AutoDome System?

AutoTracker Version	Standard Version	LTC 0829/15C	LTC 0929/15C	LTC 0949/15C	LTC 7490/20C	LTC 0825/15C	LTC 0825/17C	LTC 0925/15C	LTC 0925/17C	LTC 0945/15C	LTC 0945/17C	BUB-G3ASCL	BUB-G3ASTI	ENV-PAOT	G3A-TRKR	LTC 9540/00	ENV-PA2	ENV-PA2T	LTC 9543/01
G3ACS5CT	G3ACS5C	●			●							●			●				
G3ACS5TT	G3ACS5T	●			●								●		●				
G3ADS5CT	G3ADS5C		●		●							●			●				
G3ADS5TT	G3ADS5T		●		●								●		●				
G3AES5CT	G3AES5C			●	●							●			●				
G3AES5TT	G3AES5T			●	●								●		●				
G3ACPW2CWT	G3ACPW2CW					●											●	●	
G3ACPW2TWT	G3ACPW2TW						●										●	●	
G3ACPW5CPT	G3ACPW5CP					●								●					●
G3ACPW5CWT	G3ACPW5CW					●								●		●			
G3ACPW5TPT	G3ACPW5TP						●							●					●
G3ACPW5TWT	G3ACPW5TW						●						●	●		●			
G3ADPW2CWT	G3ADPW2CW							●									●	●	
G3ADPW2TWT	G3ADPW2TW								●								●	●	
G3ADPW5CPT	G3ADPW5CP							●						●					●
G3ADPW5CWT	G3ADPW5CW							●						●		●			
G3ADPW5TPT	G3ADPW5TP								●					●					●
G3ADPW5TWT	G3ADPW5TW								●					●		●			
G3AEPW5CPT	G3AEPW5CP									●				●					●
G3AEPW5CWT	G3AEPW5CW									●				●		●			
G3AEPW5TPT	G3AEPW5TP										●			●					●
G3AEPW5TWT	G3AEPW5TW										●			●		●			
G3AEPW2CWT	G3AEPW2CW									●							●	●	
G3AEPW2TWT	G3AEPW2TW										●						●	●	



Selecting the correct BasicDome

Economical Systems



A. Camera

Power Options	Part Number
(NTSC)	- G3B61
(PAL)	- G3B51



B. Mount

Mounting Options	Part Number
S	- G3BS
PW	- G3BPW



What are the components of a BasicDome System?

Standard Version	G3B51	G3BS	G3BPW	LTC9540/00	LTC9543/01
G3BS50	●	●			
G3BPW50W	●		●	●	
G3BPW50P	●		●	●	●

Pressurized Dome

Environmental Systems



Pressurized Dome
Camera Assembly

A. Camera

Power Options	Camera Options	Part Number
	Monochrome	- LTC 0729/25C
	Color	- LTC 0829/25C
	18x Day/Night	- LTC 0929/27C
	26x Day/Night	- LTC 0949/25C
	Monochrome	- LTC 0729/15C
	Color	- LTC 0829/15C
	18x Day/Night	- LTC 0929/15C
	26x Day/Night	- LTC 0949/15C



B. Power Supply Options

	Part Number
120 VAC Without Fibre	- ENV-PSU1
120 VAC With Fibre	- ENV-PSU1F
230 VAC Without Fibre	- ENV-PSU2
230 VAC With Fibre	- ENV-PSU2F



C. Housing

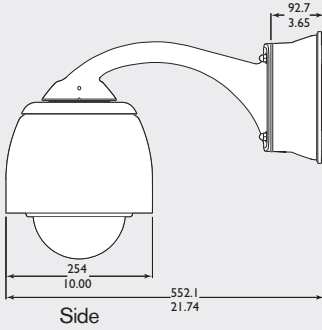
PRS-Housing



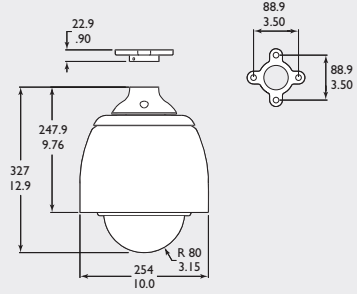
System Dimensions

EnviroDome Outdoor Systems

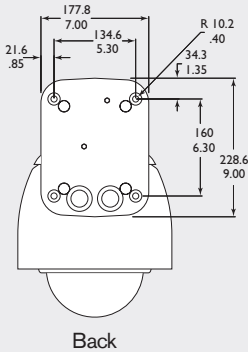
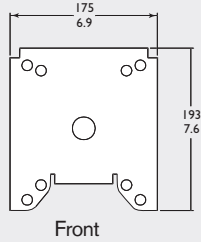
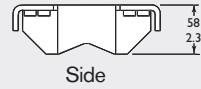
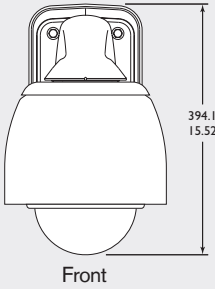
Wall Mount



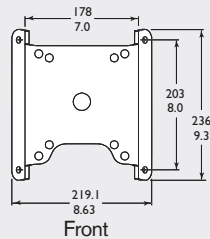
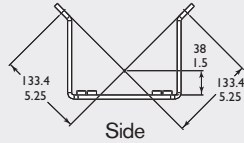
Pipe Mount



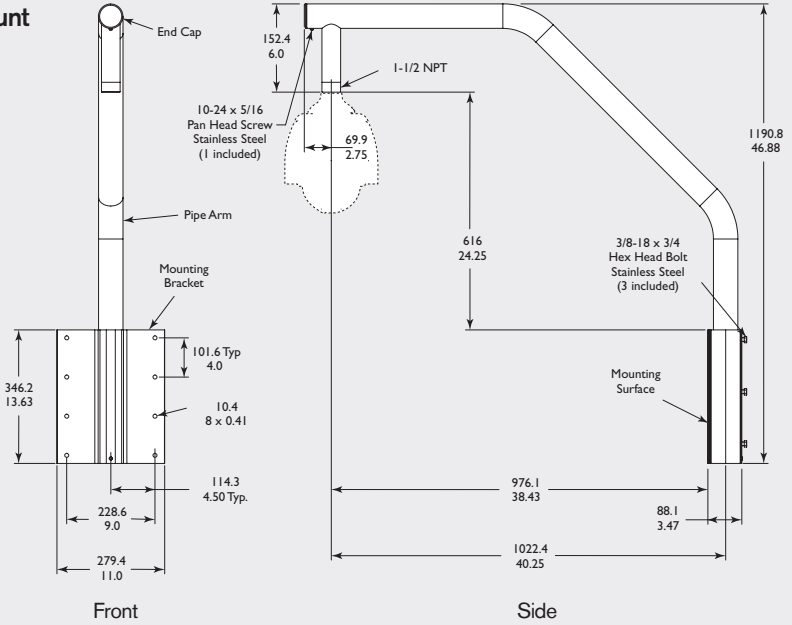
Mast Mount



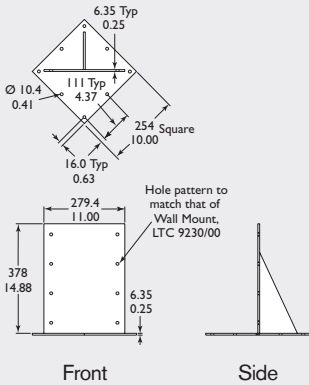
Corner Mount



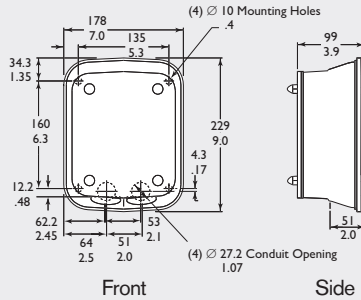
Roof Mount



Roof Mount Adapter



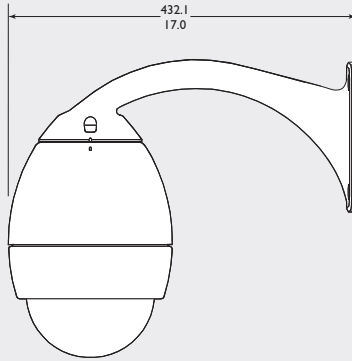
Power Supply for Pipe & Roof Mounts



System Dimensions

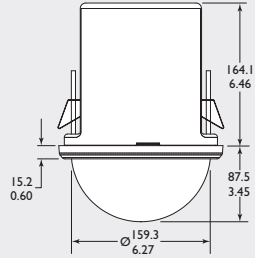
AutoDome Indoor Systems

Wall Mount

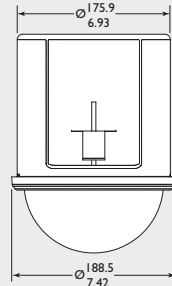


SIDE

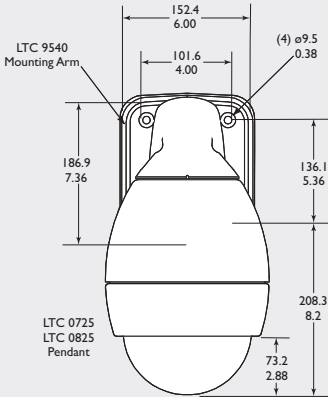
In-Ceiling Mount



FRONT

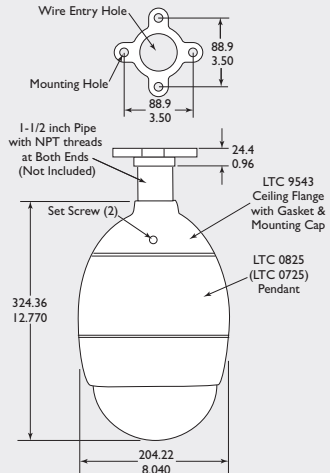


SIDE

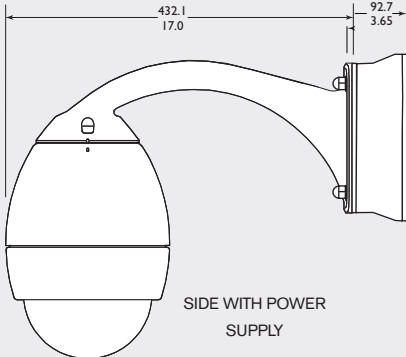


FRONT

Pipe Mount



Wall Mount

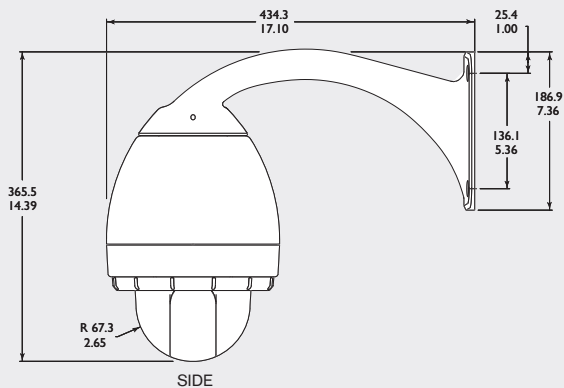


SIDE WITH POWER SUPPLY

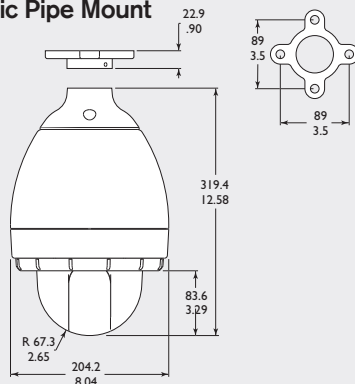
System Dimensions

BasicDome Economical Systems

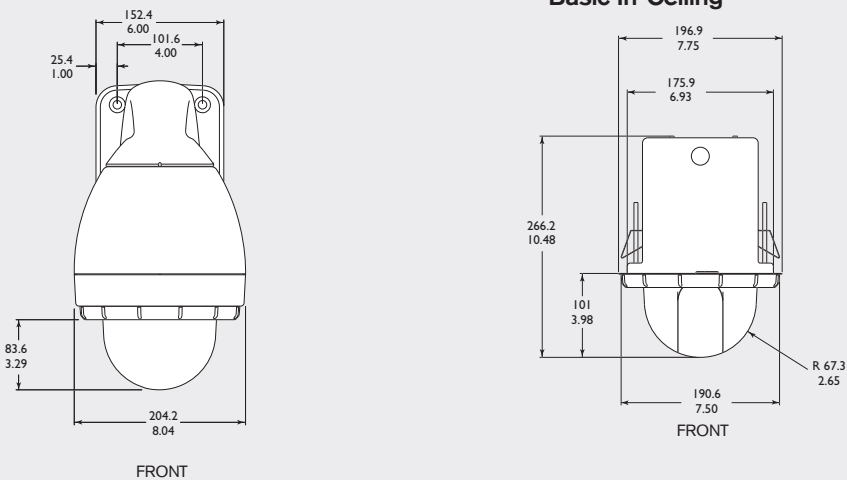
Basic Pendant



Basic Pipe Mount

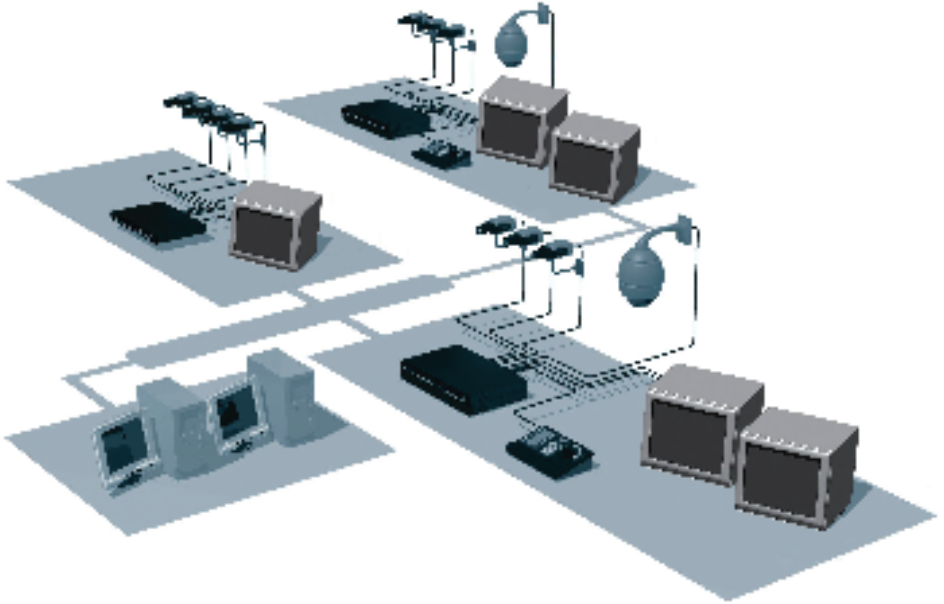


Basic In-Ceiling



System Configurations

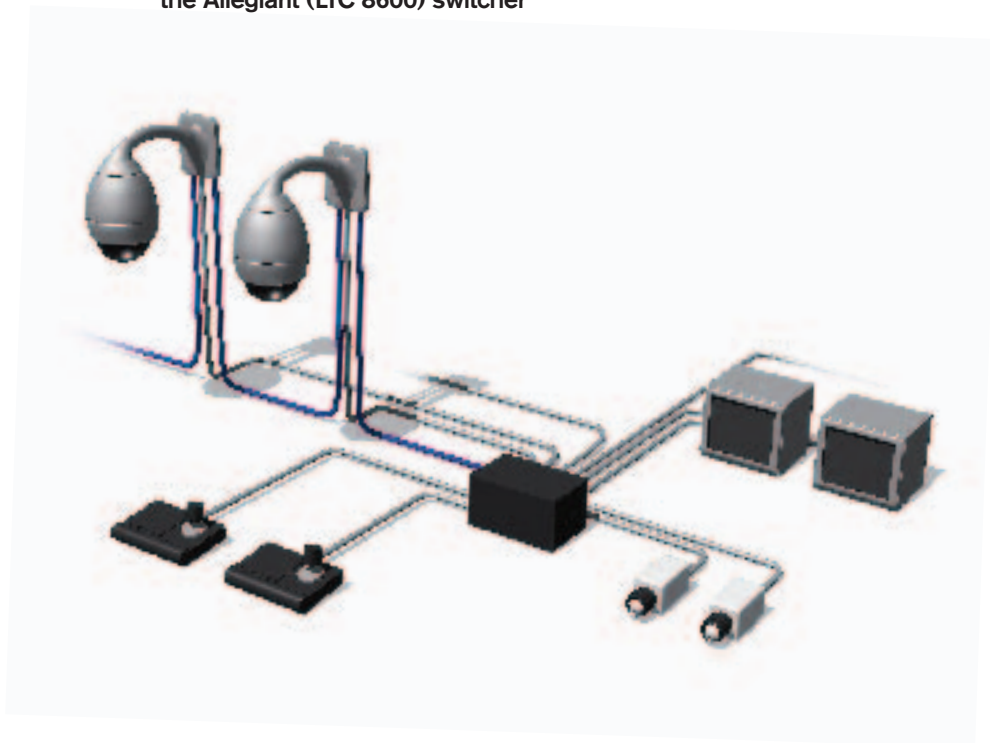
Typical digital system
using the Divar recorder



Divar AutoDome Control Using Divar Digital Recorder

Using the Divar digital versatile recorder, the AutoDome can be viewed, controlled and even configured from the local system to virtually anywhere in the world using Divar Control Center.

**Typical matrix system using
the Allegiant (LTC 8600) switcher**



Allegiant Video Matrix

The Allegiant Matrix Switcher is the solution for your control center needs – from eight cameras with two monitors to 4,096 cameras with 512 monitors. The Allegiant allows for complete control of the AutoDome line via the universal keyboard.

Glossary of AutoDome Terms

Address

Each AutoDome has a numerical address in the control system in which it is located. This allows the appropriate dome to be operated. The address may be set manually on the unit via dip switches or remotely (see Fast Address).

AutoDome

Fully integrated, high speed, pan/tilt camera built into a protective dome housing allowing full 360° coverage of the scene.

AutoTrack

A patented technology that integrates motion detection into the camera allowing tracking of object and zooming in to optimize size and perspective.

Auto Focus

The lens continuously adjusts to the correct focus automatically for the sharpest picture.

Autolris

The lens iris opening is automatically adjusted to allow the correct illumination of the camera sensor.

AutoPan

The camera pans continuously between right and left limit settings.

AutoPivot

As the camera tilts through the vertical position, the camera is rotated to maintain the correct orientation of the image.

AutoPlayback

This function records the sequence of movements of the AutoDome (P/T/Z) for later playback allowing a set pattern to be repeated automatically. This function is often called Guard Tour.

AutoScaling

As the camera zooms in to increase the size of objects on the monitor screen, the pan and tilt speeds are reduced so that the relative speed on the screen remains constant for similar joystick control positions.

BasicDome

Bosch solution for an economical dome package that incorporates a vast amount of the AutoDome features into a modular, discrete package.

Bi-Phase

Pan/Tilt/Zoom protocol for Bosch products.

Day/Night

An AutoDome that has normal color operation in situations where there is sufficient illumination (day conditions), but where the sensitivity can be increased when there is little light available (night conditions). This is achieved by removing the infrared cut filter used for good color rendition and/or integrating a number of frames to increase the signal to the noise ratio of the camera.

EnviroDome

AutoDome with environmental protection that allows it to be used outdoors in almost any climate.

Fast Address

A system for setting the address of the AutoDome remotely from the control system.

Preset Tour

A sequence of preset shots combined to provide a pre-programmed tour of the area covered by an AutoDome camera.

Guard Tour

Allows recorded tours with a combined duration of 15 minutes. Recorded tours consist of control commands and can be played back as needed. All camera position information is stored for maximum flexibility (including pan, tilt, zoom, etc.).

Image Stabilization

Software correction for vibration caused by wind or other outside forces on the camera.

IP 66

The IP code (Ingress Protection) indicates the degree of protection provided by enclosures for electrical equipment. The first number indicates protection of internal equipment against the ingress of solid foreign objects. The second number indicates protection of internal equipment against harmful ingress of water. Higher digits refer to higher levels of protection. See also NEMA rating.

NEMA rating

(National Electric Manufacturers Association) Specification standards in reference to the operating environment for a variety of electrical devices.

Pan

Camera movement in the horizontal direction.

Pre-Position

A pre-selected and stored combination of pan, tilt and zoom positions that allow a set view to be recalled. Also known as Preset Shot.

Pressurized Dry Nitrogen Housing

A housing for outdoor applications that protects against smog, humidity, dirt and dust.

Privacy Masking

The ability to mask out a specific area to prevent it being viewed.

RS232/485

A communication interface for third party control and firmware upgrades to the AutoDome products.

Sector Blanking

The ability to blank out video in any of the 16 pan sectors.

Slow Shutter

With this option the camera can reduce the shutter speed to as little as one second, thus increasing the sensitivity to nearly 0.002 lux in select models. Comes as a standard feature on all color and day/night EnviroDomes.

Spot Focus

Activates Auto Focus for three seconds after camera movement.

Tilt

Camera movement in the vertical direction.

Zoom

Changing the effective focal length to allow different fields of view to fill the picture area. Zoom can be optical, where the lens is adjusted, or digital, where a portion of the view is magnified electronically.



Notes for your AutoDome

Bosch Security Systems
For more information please visit
www.boschsecuritysystems.com

All rights reserved
Printed in The Netherlands
9498 961 67814en

Tradition of quality and innovation

For over 100 years, the Bosch name has stood for quality and reliability. Bosch Security Systems proudly offers a wide range of fire, intrusion, CCTV, management and communication systems and components to help you find the solution for any application. We are the global supplier of choice for innovative technology backed by the highest level of service and support. When you need solutions you can rely on, choose Bosch.

www.boschsecuritysystems.com