

# EnviroDome Camera Systems



## Security Systems



Formerly known  
as Philips CSI

- Day/Night, Color & B/W Versions
- 25x (Day/Night) or 18x Optical Zoom Range +12x Digital Zoom
- Weather-resistant Design
- Rugged Bubble Option
- Digital Image Stabilization (25x)
- Privacy Masking and Sector Blanking
- High Resolution/Sensitivity
- Remotely Configurable (Bi-Phase, RS-232, RS-485)
- Patented AutoPivot and Auto Scaling Features
- Revolutionary New AutoTrack Motion Tracking Option
- Three-year Warranty

Whatever the weather may bring, the EnviroDome maintains peak performance, making it the ideal solution for perimeter surveillance, parking lots and other outdoor applications. The EnviroDome has all of the features needed to capture the details missed by other cameras.

The revolutionary new AutoTrack feature, built directly into the camera, marks a new generation in motion detection. AutoTrack not only senses movement, but zooms in on the target and follows it, leaving guards' hands free for other responsibilities.

Image control and quality are integral aspects of any outdoor surveillance system. The EnviroDome offers optical zoom lenses from 18x to 25x, and all systems offer a full 12x digital zoom once the end of the optical zoom is reached. In addition, the patented scaling feature ensures that you have optimal control for viewing at all zoom settings. To further improve picture quality, digital image stabilization compensates for camera movements caused by environmental conditions, ensuring a steady picture.

Effective surveillance cameras must also perform well under a range of lighting conditions. To enhance sensitivity when night falls, the Day/Night EnviroDome automatically switches from color to monochrome by removing the infrared filter. Whether you program the camera to switch automatically, or use the manual switch, the result is optimal camera function, day or night. For ultimate sensitivity, the B/W camera can be used. For operation in the darkest conditions, the slow shutter control feature (standard on all Color and Day/Night EnviroDome cameras) automatically reduces the shutter speed to as little as 1 second. This increases sensitivity by more than 50 times.

In answer to concerns about personal privacy, the EnviroDome provides sector blanking and privacy masking. These features allow customization to ensure privacy for diverse needs.

Supported menu languages include: English, French, German, Spanish, Portuguese, and Polish.

The following are some of the features that make the EnviroDome one of the most flexible domes in the industry. These adjustments can be made by the installer to customize the EnviroDome's operation to meet a particular customer's needs.

### *Rugged Bubble (Option)*

- Rugged Bubbles are made from 3mm thick Polycarbonate, designed to meet stringent strength standards without compromising optical clarity.
- The Bubble, by itself, can withstand a 100 foot-pound impact. This energy is equivalent to that of a 10 lb sledgehammer being dropped from a height of 10 feet.
- The Bubble, installed in the Dome, exceeds the UL 1598 horizontal impact standard for lighting fixtures, by a factor of 10.

### *Camera Commands*

- Picture quality settings such as **White Balance** and **Sharpness**.
- **Max Gain:** When Automatic Gain Control (AGC) is on, the EnviroDome allows selection of a specific **max** setting that the AGC can achieve, limiting graininess of the picture. The camera automatically adjusts to very low-light situations.
- **Slow Shutter (Frame Integration):** By slowing the shutter speed, the camera's sensitivity increases, resulting in visibility at much lower light levels. Available settings are *fully automatic*, or one of 6 specific shutter speeds.
- **Digital Zoom:** A full 12x digital zoom can be utilized once the maximum optical zoom has been reached. If digital zoom is not desired, it can be disabled.

### *Day/Night Commands*

- **Night Mode:** This feature switches the camera from Color to Monochrome and removes the IR filter, thus increasing the camera's sensitivity in low light applications. Settings are *on*, *off*, or *fully automatic*.
- **Night Mode Threshold:** When set to *automatic*, this feature determines the light level at which the camera will switch to night mode.

- **Digital Stabilization (25X Versions):** Electronic compensation which filters out vibrations of up to 80% movement at 10 Hz, as caused by wind and other environmental conditions.

### *Dome Commands*

- **Sector Blanking:** Video blanking in up to 16 specified sectors within total field-of-view.
- **Privacy Masking:** Up to six (6) areas can be masked from visibility.
- **Guard Tours:** There are two styles of Guard Tours:
  1. The **preset tour** has capability for up to 99 presets, which can either be included or excluded from the tour. The dwell time can be specified, whereupon each of the included presets will be visited consecutively. This tour continues until operator intervention.
  2. **Recorded tours:** (2) are available, 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. This creates a smoother, more thorough type of automated tour.
- **Inactivity:** When an operator stops manual control of a dome, the inactivity option determines what the dome should do next, if anything. The options are to *return to a specific preset*, *return to the automated tour previously executed*, or *do nothing*. The installer can determine the duration of the inactivity period.
- **Password Control:** This feature allows the installer to determine the security level of dome commands. Available settings are as follows:
  1. **Low** (any user can access any option).
  2. **Medium** (a published command unlocks the commands [OFF-90-ENTER]).
  3. **High** (a four digit (modifiable) password is required to unlock the commands).

Camera: 18X COLOR/18X DAY/NIGHT	
Imager	1/4-in IT CCD (752 x 582 PAL)/(768 x 494 NTSC)
Lens	18X Zoom (4.1 mm – 73.8 mm) F1.4 to F3.0
Focus	Automatic with Manual Override
Iris	Automatic with Manual Override
Field of View	2.7° to 48°
Video Output	1.0 Vp-p, 75 Ω
Gain Control	Off/Auto (with Adjustable Limit)
Synchronization	Line-Lock (–120 to 120° Vertical Phase Adjust) or Internal Crystal
Aperture Correction	Horizontal and Vertical
Digital Zoom	12X
Horizontal Resolution	470 TVL (NTSC)/460 TVL (PAL)
Sensitivity (Usable Video)	18X COLOR      18X DAY/NIGHT
- Day Mode w/Slow Shutter Off	0.025 fc/0.25 lx      0.025 fc/0.25 lx
- Night Mode w/Slow Shutter Off	—      0.0031 fc/0.031 lx
- Day Mode w/Slow Shutter On	0.0016 fc/0.016 lx      0.0016 fc/0.016 lx
- Night Mode w/Slow Shutter On	—      0.0002 fc/0.002 lx
SNR	>50 dB
White Balance	2000 K to 10,000 K

Camera: 25X DAY/NIGHT	
Imager	1/6-in IT CCD (752 x 582 PAL)/(768 x 494 NTSC)
Lens	25X Zoom (2.4 – 60 mm) F1.6 to F2.7
Focus	Automatic with Manual Override
Iris	Automatic with Manual Override
Field of View	2.0° to 45°
Video Output	1.0 Vp-p, 75 Ω
Gain Control	Off/Auto (with Adjustable Limit)
Synchronization	Line-Lock (–120 to 120° Vertical Phase Adjust) or Internal Crystal
Aperture Correction	Horizontal and Vertical
Digital Zoom	12X
Horizontal Resolution	470 TVL (NTSC)/460 TVL (PAL)
Sensitivity (Usable Video)	
- Day Mode w/Slow Shutter Off	0.2 fc/2.0 lx
- Night Mode w/Slow Shutter Off	0.025 fc/0.25 lx
- Day Mode w/Slow Shutter On	0.013 fc/0.13 lx
- Night Mode w/Slow Shutter On	0.0016 fc/0.016 lx
SNR	>50 dB
White Balance	2000 K to 10,000 K

Camera: 18X MONOCHROME	
Imager	1/4-in IT CCD (752 x 582 CCIR)/(768 x 494 EIA)
Lens	18X Zoom (4.1 mm – 73.8 mm) F1.4 to F3.0
Focus	Automatic with Manual Override
Iris	Automatic with Manual Override
Field of View	2.7° to 48°
Video Output	1.0 Vp-p, 75 Ω

Gain Control	Off/Auto (with Adjustable Limit)
Synchronization	Line-Lock (–120 to 120° Vertical Phase Adjust) or Internal Crystal
Aperture Correction	Horizontal and Vertical
Digital Zoom	12X
Horizontal Resolution	520 TVL (typ)
Sensitivity (Usable Video)	0.0031 fc/0.031 lx
SNR	>50 dB
White Balance	N/A

Environmental	
Humidity	0% to 100% Relative, Condensing
Ingress Protection	IP66, NEMA 4X
Operating Temp	– 40°C to 50°C (– 40° F to 122° F)
Storage Temp	– 40°C to 60°C (– 40° F to 140° F)

Mechanical	
Weight	5.9 kg (13 lb)
Pan/Tilt	360° Continuous Pan, –5° to 90° Tilt From Horizontal Plane
Pre-position Speed	360°/sec, ± 0.50° Accuracy
Variable Speed	120°/sec

Miscellaneous	
Sectors/Titling	16 Independent Sectors with 16-Character Titles/Sector
Camera Setup/Control	Biphase or RS-232
Pre-positions	99 Each with 16-Character Titles
Guard Tours	2 Types of Tours: Recorded Tours - Two (2), Totaling 15 Minutes Duration for Both; Preset Tour - One (1), Consisting of Up To 99 Scenes Consecutively
Addressing	FastAddress Remote Addressing or 4 Digit Thumbwheel
Supported Languages	English, French, German, Spanish, Portuguese, and Polish
Safety Marks	CE, UL

### User Connections

Power (Camera)	21 - 28 VAC, 50/60Hz - 15 W Maximum
Power (Heater)	21 - 28 VAC, 50/60Hz - 30 W Maximum
Biphase + / -	Control Data
RS-232 RX/TX or RS-485 + / -	Optional Control Data (dip switch selectable)
Video	BNC
Alarm Inputs (4)	Programmable for "Normally Open" or "Normally Closed"
Relay Out (1)	Dry Contact Output Rating: 2A @ 30 VAC

### Mounts/Accessories

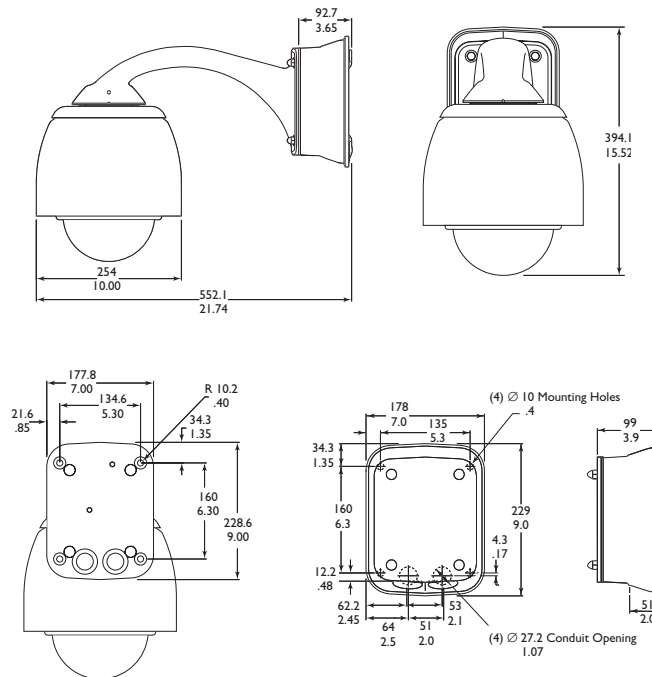
Wall Arm (No Transformer)	ENV-PA0
Wall Arm (120/230 VAC Transformer)	ENV-PA1 / ENV-PA2
Wall Arm (120/230 VAC Transformer and Fiber Optics)	ENV-PA1F / ENV-PA2F
Optional Mounting Plates for Above	
Corner Mounting Plate	LTC 9542/01
Mast (Pole) Mounting Plate	LTC 9541/01
Pipe Mount Cap	LTC 9543/00
Roof (Parapet) Mount	LTC 9230/00
Flat Roof Adapter (for above)	LTC 9230/01
Outdoor Power Supply Box (120/230 VAC Transformer)	ENV-PSU1 / ENV-PSU2
Outdoor Power Supply Box (120/230 VAC Transformer and Fiber Optics)	ENV-PSU1F / ENV-PSU2F

### Fiber Optic Accessories

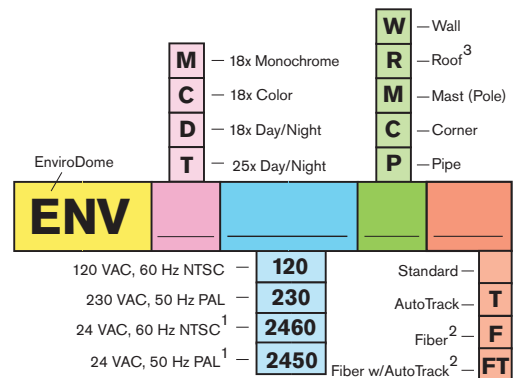
Optical Fiber Compatibility	50/125 mm, 62.5/125 mm, Low Loss Multimode Glass Fiber, Rated for a Minimum System Bandwidth of 20 MHz (Video 850 nm/Control 1300 nm)
Max Distance	4 km (2.5 miles)

\* Additional accessories available - See Accessories Datasheet.

### Dimensional Drawings



### Ordering Guide



- 1 No transformer included. Customer must supply 24 VAC, 50 VAC 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.
- 3 Roof mount mounts to vertical parapet. For flat roof installations, you must also order the LTC 9230/01 Flat Roof Adapter Plate.

Note: The Rugged Bubble option is ordered separately, as a replacement component, available in Clear or Tinted.

Bosch Security Systems, Inc.  
850 Greenfield Road  
Lancaster, PA 17601  
Tel: 800-326-3270  
Fax: 717-735-6560  
www.boschsecuritysystems.com

# BOSCH