Spectra III™ SE Series Discreet Dome Systems
PREMIER INTEGRATED DOME SYSTEM

CE

c (UL) US
LISTED

IP66

U.S. Patent
#5,931,432

Product Features

- Three Auto Focus, High-Resolution Integrated Camera/Optics Packages; Five Back Box Models
- Color/Black and White, 80X Wide Dynamic Range, and Motion Detection (SD53CBW Series)
- Built-in Back Box Memory
- ExView HAD™ CCD (SD53M22 and SD53C22 Series)
- Window Blanking
- Horizontal and Zone Blanking
- RJ-45 Data Port for Software Update and Setup
- On-Screen Compass and Tilt Display
- Multi-Language On-Screen Menus
- Password Protection
- Freeze Frame During Presets
- 7 Alarm Inputs; 2 Programmable Auxiliary Outputs
- Built-in Power Line Surge and Lightning Protection
- Easy to Install – Quick and Simple Electrical Connections
- Indoor/Outdoor Applications

PENDANT MODEL

SURFACE MOUNT MODEL

Pelco introduces the next generation of its premier integrated dome system, **Spectra III™ SE**. This industry-leading system boasts many innovative new features.

Spectra III SE features multiple back box configurations and three auto focus, high-resolution dome drives with programmable software.

Spectra III SE's back box models feature built-in memory to store camera and location-specific dome settings, including labels, presets, patterns, and zones. These settings are automatically downloaded if a new dome drive is installed. Two new back box models have been added to the line: an environmental in-ceiling model for outdoor soffits and an indoor surface mount model that installs quickly and easily to any type of ceiling.

Spectra III SE's dome drives include a choice of a color/black and white camera with an infrared cut filter, 80X wide dynamic range, and motion detection; a color camera; or a monochrome camera. The color and monochrome cameras use Exview HAD™ CCD and LowLight™ technology.

Spectra III SE dome systems feature many new software enhancements that increase performance and make programming and operation easy. Window blanking allows a user to program up to eight, four-sided, user-defined privacy areas. Password protection prevents unauthorized users from changing the system setup and other sensitive dome drive settings.

Other new features include an on-screen compass and tilt display; Multi-Language menus programmable for English, Spanish, Portuguese, Italian, French, and German; and an RJ-45 data port for software uploads and on-site setup and programming.

Spectra III SE's variable speed capabilities range from a smooth, fast pan motion of 360° per second to a smooth "creep" speed of .1° per second. The system is capable of 360° rotation and has an "auto flip" feature that allows the dome to rotate 180° and reposition itself for uninterrupted viewing of any subject that passes directly beneath the dome.

ISO 9001 CERTIFIED

FEATURES/BENEFITS

COMPONENT FEATURES
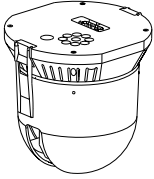
### Dome Drive

- 80 Presets with Camera Settings and Labels
- ±0.1° Preset Accuracy
- Multi-Language Menus (English, Spanish, Portuguese, Italian, French, and German)
- RJ-45 Data Port for Software Update and Setup
- On-Screen Compass, Tilt, and Zoom Display
- Password Protection
- 360°/sec Pan Preset Speed and 200°/sec Tilt Preset Speed
- Rotating Discreet Liner with Sealed Fixed Bubble
- Window Blanking – Up to Eight, Four-Sided, User-Defined Shapes
- Eight Zones (programmable in size) Can Be Labeled with up to 20 Characters Each or Set to Output Blank Video
- Seven Alarm Inputs
- One Auxiliary (Form C) Relay Output and One Open Collector Auxiliary Output (can be alternately programmed to operate upon alarm)
- Programmable Locations of Labels and On-Screen Displays

- Action on Alarm – Alarms can be individually programmed for three priority levels, to initiate a stored pattern, or to go to an associated preset when received
- Resume After Alarm – Allows the dome to return to a previously programmed state after alarm acknowledgement or to its previous position before alarm
- Patterns – Up to four, on-screen, user-defined programmable patterns. Includes pan, tilt, zoom, and preset functions
- Proportional Pan & Tilt – Continually decreases pan and tilt speeds in proportion to depth of zoom
- Variable Scan Speed – Scan speed can be programmable between 1-40°/sec
- Pan Motion Allows 0.1-150°/sec Pan Speed
- Programmable Limit Stops for Auto/Random/Frame Scan Modes
- Auto-sensing Protocol (Coaxitron®, RS-422 P, and D Series); accepts competitive control protocol with optional translator card
- Built-in Menu System for Setup of Programmable Functions
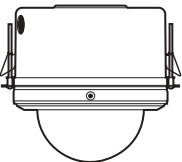- "Auto Flip" Rotates Dome 180° at Bottom of Tilt Travel
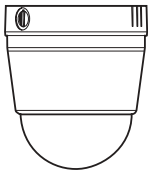
Surface Mount (Indoor), Back Box and Lower Dome

- Built-in Memory to Store Camera and Location-Specific Dome Settings
- Available in Black or White Finish
- Installs Quickly and Easily to Any Type of Ceiling
- Quick Disconnect to Dome Drive
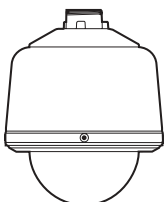- Injection-Molded Plastic
- 5.9-Inch Acrylic Bubble
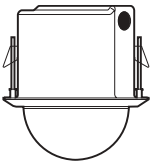
In-Ceiling (Indoor), Back Box and Lower Dome

- Built-in Memory to Store Camera and Location-Specific Dome Settings
- Single Back Box for Suspended or Hard Ceiling Applications
- Very Easy In-Ceiling Installation Requiring Only 5.25-Inch Space Above Ceiling and 3.25 Inches Below
- 5.9-Inch Acrylic Bubble

- Minimum Ceiling Thickness .5-Inch; Maximum 1.75 Inches
- Quick Disconnect to Dome Drive
- Suitable for Use in Environmental Air Handling Spaces
- Ratings: Meets NEMA 1, IP40 Standards
- Aluminum Construction

Environmental In-Ceiling, Back Box and Lower Dome

- Built-in Memory to Store Camera and Location-Specific Dome Settings
- Single Back Box for Hard Ceiling Applications
- Very Easy In-Ceiling Installation Requiring Only 4.4-Inch Space Above Ceiling and 4.3 Inches Below
- Includes Heater and Fan

- Minimum Ceiling Thickness .5-Inch; Maximum 1.75 Inches
- 5.9-Inch Acrylic Bubble
- Quick Disconnect to Dome Drive
- Ratings: Meets NEMA 4X, IP66 Stardards
- Aluminum Construction

Standard and Environmental Pendant, Back Box and Lower Dome

- Standard and Environmental Models
- Built-in Memory to Store Camera and Location-Specific Dome Settings
- Available in Black or Gray Finish
- Pendant 10.6-Inch Overall Length (including dome)

- Quick Disconnect to Dome Drive
- Ratings: Meets NEMA 4X, IP66 Standards
- Aluminum Construction
- 5.9-Inch Acrylic Bubble
- Environmental model includes sun shield, fan and heater

TECHNICAL SPECIFICATIONS

GENERAL

Construction	
Back Box	
Surface Mount	Plastic
In-ceiling	Aluminum
Pendant	Aluminum
Dome Drive	Aluminum, thermo plastic
Lower Dome	Acrylic
Light Attenuation	
Smoked	1/2 f-stop light loss
Clear	Zero light loss
Chrome	2 f-stops light loss
Gold	2 f-stops light loss
Cable Entry (Back Box)	
In-Ceiling and	
Surface Mount	.75-inch conduit fitting
Pendant	Through 1.5-inch NPT pendant mount
Dimensions	See dimension drawings

Weight (approximate)

	Unit	Shipping
Back Box		
Surface Mount	.7 lb (.32 kg)	2 lb (.9 kg)
In-Ceiling	1.5 lb (.68 kg)	2 lb (.9 kg)
Environmental In-Ceiling	2.1 lb (.95 kg)	3 lb (1.36 kg)
Pendant Indoor	2.4 lb (1.09 kg)	4 lb (1.81 kg)
Environmental Pendant	3.5 lb (1.59 kg)	5 lb (2.27 kg)
Dome Drive	2.4 lb (1.09 kg)	4 lb (1.81 kg)
Lower Dome		
Surface Mount	.4 lb (.18 kg)	1 lb (.45 kg)
In-Ceiling	.2 lb (.09 kg)	1 lb (.45 kg)
Pendant and		
Environmental In-Ceiling	.6 lb (.27 kg)	2 lb (.9 kg)

Environment	
Surface Mount	Indoor
In-Ceiling	Indoor
Environmental In-Ceiling	Outdoor
Pendant Standard and Environmental	Indoor/Outdoor
Operating Temperature	
Surface Mount and In-Ceiling Indoor	32° to 122°F (0° to 50°C)
Standard Pendant	(Assumes no wind chill factor)
Maximum	113°F (45°C) absolute maximum; 95°F (35°C) sustained maximum,
Minimum	25°F (-4°C) sustained minimum
Environmental In-Ceiling and Environmental Pendant	(Assumes no wind chill factor)
Maximum	140°F (60°C) absolute maximum; 122°F (50°C) sustained maximum
Minimum	-60°F (-51°C) absolute minimum; Prevents icing at sustained minimum of -50°F (-45°C); de-ices .1 inch (2.5 mm) within 3 hours after power-up.
Effective Projected Area (EPA)	~175 square inches

MECHANICAL   *(Dome Drive Only)*

Pan Movement	360° Continuous pan rotation
Vertical Tilt	Unobstructed +2° to -92°
Manual Pan/Tilt Speeds	
Pan	0.1°-80°/sec manual operation, 150°/sec Turbo
Tilt	0.1°-40°/sec manual operation
Preset Speeds	
Pan	360°/sec
Tilt	200°/sec
	For variable-speed operation an appropriate controller is required. (With non-variable speed control, Spectra III™ pan/tilt speed is 20°/sec)

ELECTRICAL

Input Voltage	18-30 VAC; 24 VAC nominal
Input Power	25 VA nominal (without heater); 70 VA nominal (with heater)
Fuse	1.25A
Auxiliary Outputs	2
Alarm Inputs	7

CERTIFICATIONS

◆ CE, Class B
◆ UL Listed
◆ UL Listed to Canadian safety standards
◆ FCC, Class B

Meets the following standards:
- NEMA Type 4X, IP66 when installed properly (BB53-F-E, BB53-PB, BB53-PG, and BB53-PG-E)
- NEMA Type 1, IP40 (BB53-SMW, BB53-SMB and BB53-F)

OPTIONAL ACCESSORIES

TXB Series	Translator boards for AD Manchester, Philips (Burle), and Vicon® protocols.

RECOMMENDED MOUNTS

Surface Mount Domes

PASMB	Pole adapter for surface mount dome, black

In-Ceiling Domes

SD5-P	2' x 2' drop ceiling panel, aluminum construction. Replaces 2' x 2' ceiling tile
SCA1	Support rails for BB5A-F; for use in ceiling tile applications.

Pendant Domes

BB5-PCA-BK	Pendant conduit adapter, black
BB5-PCA-GY	Pendant conduit adapter, gray
IWM Series	Wall mount, with or without integral 24 VAC, 100 vA transformer. Black or gray finish. Can be adapted for corner, parapet or pole applications.
MRCA	Ceiling mount, black
MRWA	Wall mount, black
PP4348	Parapet roof mount
PP350/PP351	Parapet wall/roof mount
SWM Series	Compact wall mount, black or gray finish. Can be adapted for corner or pole applications.

CAMERA/OPTICS

	Color/Black & White (23X)	Color (22X)	Monochrome (22X)
Signal Format	NTSC (DD53CBW) PAL (DD53CBW-X)	NTSC (DD53C22) PAL (DD53C22-X)	EIA (DD53M22) CCIR (DD53M22-X)
Scanning System	Progressive (2:1 Interlace output)	2:1 Interlace	2:1 Interlace
Image Sensor Effective pixels NTSC PAL	1/4-inch CCD 724 (H) X 494 (V) 724 (H) X 582 (V)	1/4-inch Ex-View CCD 768 (H) X 494 (V) 752 (H) X 582 (V)	1/4-inch Ex-View CCD 768 (H) X 494 (V) 752 (H) X 582 (V)
Horizontal Resolution NTSC PAL	 >470 TV Lines >470 TV Lines	 >470 TV Lines >460 TV Lines	 >500 TV Lines >500 TV Lines
Lens	F1.6 (f = 3.6~82.8mm optical)	F1.6 (f = 4~88mm optical)	F1.6 (f = 4~88mm optical)
Zoom	23X optical, 10X electronic	22X optical, 12X electronic	22X optical, 12X electronic
Zoom Speed	4.2 seconds	3.9 seconds	3.9 seconds
Horizontal Angle of view Focus	54° at 3.6mm wide zoom; 2.5° at 82.8mm telephoto zoom Automatic with manual override	47° at 4.0mm wide zoom; 2.2° at 88mm telephoto zoom Automatic with manual override	47° at 4.0mm wide zoom; 2.2° at 88mm telephoto zoom Automatic with manual override
Maximum Sensitivity @35 IRE NTSC/EIA PAL/CCIR	 0.08 lux with 1/2 sec (color) 0.3 at 1/60 sec shutter (B/W) 0.013 lux with 1/2 sec (B/W) 0.08 lux with 1/1.5 sec (color) 0.3 at 1/50 sec shutter (B/W) 0.013 lux with 1/1.5 sec (B/W)	 0.02 lux with 1/2 sec shutter 0.02 lux with 1/1.5 sec shutter	 0.005 lux with 1/2 sec shutter 0.005 lux with 1/1.5 sec shutter
Sync System	Internal/AC line lock, phase adjust-able via remote control, V-Sync	Internal/AC line lock, phase adjust-able via remote control, V-Sync	Internal/AC line lock, phase adjust-able via remote control, V-sync
White Balance	Automatic with manual override	Automatic with manual override	—
Shutter Speed NTSC PAL	Automatic (electronic iris)/Manual 1/2 ~1/30,000 1/1.5 ~1/30,000	Automatic (electronic iris)/Manual 1/2 ~1/30,000 1/1.5 ~1/30,000	Automatic (electronic iris)/Manual 1/2 ~1/30,000 1/1.5 ~1/30,000
Iris Control	Automatic Iris Control with manual override	Automatic Iris Control with manual override	Automatic Iris Control with manual override
Gain Control	Automatic/OFF	Automatic/OFF	Automatic/OFF
Video Output	0.714V ±0.07V (100 IRE ±10 IRE)	0.714V ±0.07V (100 IRE ±10 IRE)	0.714V ±0.07V (100 IRE ±10 IRE)
Video Signal to Noise	>50 dB	>48 dB	>48 dB
Wide Dynamic Range	80X	—	—

WINDOW BLANKING

Window blanking allows a user to program up to eight, four-sided, user-defined areas that cannot be viewed by the operator of the dome system. A blanked area will move with pan and tilt functions and automatically adjust in size as the lens zooms telephoto and wide.
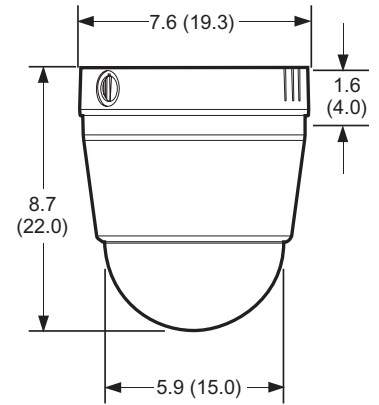

BEFORE

AFTER

BEFORE

AFTER

WIDE DYNAMIC RANGE

The Wide Dynamic Range (WDR) setting balances the brightest and darkest sections of a scene to produce a picture that provides more detail. The range from the darkest to the brightest sections of the scene is 80X more when WDR is ON than when OFF.
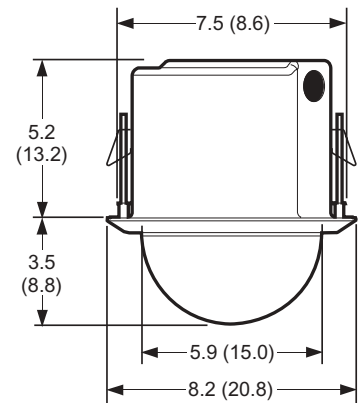
SURFACE MOUNT

7.6 (19.3)

1.6 (4.0)

8.7 (22.0)

5.9 (15.0)

IN-CEILING

7.5 (8.6)

5.2 (13.2)

3.5 (8.8)

5.9 (15.0)

8.2 (20.8)

IN-CEILING, ENVIRONMENTAL

9.9 (25.2)

4.4 (11.0)

4.3 (10.6)

5.9 (15.0)

8.9 (22.8)

PENDANT

10.6 (26.9)

5.9 (15.0)

8.6 (21.8)
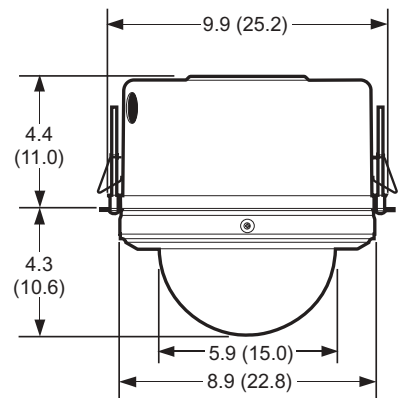
ENVIRONMENTAL

STANDARD
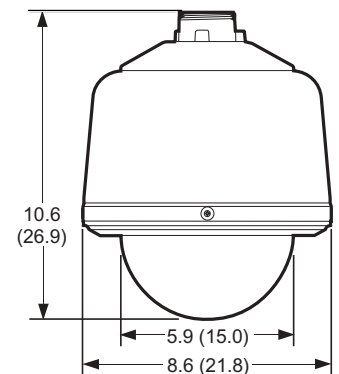
NOTE: VALUES IN PARENTHESES ARE CENTIMETERS;
ALL OTHERS ARE INCHES

SYSTEM MODEL NUMBERS

Type	Back Box Color	Lower Dome	23X Color/B&W*	22X Color*	22X Monochrome*
Surface Mount	White	Smoked	SD53CBW-SMW-0	SD53C22-SMW-0	SD53M22-SMW-0
		Clear	SD53CBW-SMW-1	SD53C22-SMW-1	SD53M22-SMW-1
		Chrome	SD53CBW-SMW-2	SD53C22-SMW-2	SD53M22-SMW-2
		Gold	SD53CBW-SMW-3	SD53C22-SMW-3	SD53M22-SMW-3
	Black	Smoked	SD53CBW-SMB-0	SD53C22-SMB-0	SD53M22-SMB-0
		Clear	SD53CBW-SMB-1	SD53C22-SMB-1	SD53M22-SMB-1
		Chrome	SD53CBW-SMB-2	SD53C22-SMB-2	SD53M22-SMB-2
		Gold	SD53CBW-SMB-3	SD53C22-SMB-3	SD53M22-SMB-3
In-Ceiling, Indoor	N/A	Smoked	SD53CBW-F0	SD53C22-F0	SD53M22-F0
		Clear	SD53CBW-F1	SD53C22-F1	SD53M22-F1
		Chrome	SD53CBW-F2	SD53C22-F2	SD53M22-F2
		Gold	SD53CBW-F3	SD53C22-F3	SD53M22-F3
In-Ceiling, Environmental**	Black	Smoked	SD53CBW-F-E0	SD53C22-F-E0	SD53M22-F-E0
		Clear	SD53CBW-F-E1	SD53C22-F-E1	SD53M22-F-E1
Pendant, Standard	Black	Smoked	SD53CBW-PB-0	SD53C22-PB-0	SD53M22-PB-0
		Clear	SD53CBW-PB-1	SD53C22-PB-1	SD53M22-PB-1
		Chrome	SD53CBW-PB-2	SD53C22-PB-2	SD53M22-PB-2
		Gold	SD53CBW-PB-3	SD53C22-PB-3	SD53M22-PB-3
	Lt. Gray	Smoked	SD53CBW-PG-0	SD53C22-PG-0	SD53M22-PG-0
		Clear	SD53CBW-PG-1	SD53C22-PG-1	SD53M22-PG-1
		Chrome	SD53CBW-PG-2	SD53C22-PG-2	SD53M22-PG-2
		Gold	SD53CBW-PG-3	SD53C22-PG-3	SD53M22-PG-3
Pendant, Environmental**	Lt. Gray	Smoked	SD53CBW-PG-E0	SD53C22-PG-E0	SD53M22-PG-E0
		Clear	SD53CBW-PG-E1	SD53C22-PG-E1	SD53M22-PG-E1

 * For PAL and CCIR models add "-X" suffix to part number. (Example: SD53C22-PG-E0-**X**)
** Environmental dome systems include a heater, fan, and the environmental pendant also includes a sun shield.

COMPONENT MODEL NUMBERS

Back Box		Dome Drive		Lower Dome***	
BB53-SMW	Surface mount, white	DD53CBW	Color/B&W (NTSC/EIA) camera (230X)	LD53SMW-0	Smoked, surface, white
BB53-SMB	Surface mount, black	DD53CBW-X	Color/B&W (PAL/CCIR) camera (230X)	LD53SMW-1	Clear, surface, white
BB53-F	In-ceiling	DD53C22	Color (NTSC) camera (264X)	LD53SMW-2	Chrome, surface, white
BB53-F-E	In-ceiling, black, environmental	DD53C22-X	Color (PAL) camera (264X)	LD53SMW-3	Gold, surface, white
BB53-PB	Pendant mount, black, standard	DD53M22	Monochrome (EIA) camera (264X)	LD53SMB-0	Smoked, surface, black
BB53-PG	Pendant mount, gray, standard	DD53M22-X	Monochrome (CCIR) camera (264X)	LD53SMB-1	Clear, surface, black
BB53-PG-E	Pendant mount, gray, environmental	DD5-FM	Removable, fixed mount bracket only (no camera package)	LD53SMB-2	Chrome, surface, black
				LD53SMB-3	Gold, surface, black
				LD5F-0	Smoked, in-ceiling
				LD5F-1	Clear, in-ceiling
				LD5F-2	Chrome, in-ceiling
				LD5F-3	Gold, in-ceiling
				LD53PB-0	Smoked, pendant, black
				LD53PB-1	Clear, pendant, black
				LD53PB-2	Chrome, pendant, black
				LD53PB-3	Gold, pendant, black

Notes:
To order a fixed mount dome system, refer to the component models above and select one each of the following: back box (BB53-F), dome drive (DD5-FM), plus choice of lower dome (LD5F-0, LD5F-1, LD5F-2, or LD5F-3).

For environmental applications, you must order an environmental back box (BB53-F-E) or (BB53-PG-E).

*** Use the pendant lower domes with the environmental in-ceiling and environmental pendant back boxes.

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