



Spectra III™ SE Series Dome Systems

PREMIER INTEGRATED DOME SYSTEM

Product Features

- Three Auto Focus, High-Resolution Integrated Camera/Optics Packages; Five Back Box Models
- Day/Night, 80X Wide Dynamic Range, and Motion Detection (SD53CBW Series)
- Built-in Back Box Memory
- ExView HAD™ CCD (SD53M22 and SD53C22 Series)
- Window Blanking
- Camera Title Overlay, 20 User-Definable Characters
- Horizontal and Zone Blanking
- RJ-45 Data Port for Software Update and Setup
- On-Screen Compass and Tilt Display
- Multilanguage On-Screen Menus
- Password Protection
- Freeze Frame During Presets
- 7 Alarm Inputs; 2 Programmable Auxiliary Outputs
- Built-in Surge and Limited Lightning Protection

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 options include an environmental in-ceiling model that is ideal for outdoor soffits, an indoor surface mount, indoor in-ceiling model, and pendant styles for standard and environmental installations. Each back box model features 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.

All cameras in **Spectra III SE** dome drives feature LowLight™ Technology. The day/night model features a 23X lens, built-in motion detection and 80X wide dynamic range imager. Two standard cameras, available in color or black-white, with a 22X lens and EXview HAD™ imager for increased sensitivity.

Spectra III SE dome systems feature many 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 settings.



SURFACE MOUNT MODEL



PENDANT MODEL

- Optional UTP Video Converter
- Compatible with Pelco's FS85011 and Third-Party Fiber Optic Transmitters
- Heavy-Duty and Stainless Steel Models Available

Other features include an on-screen compass and tilt display; multi-language menus for English, Spanish, Portuguese, Italian, French, and German; optional menus for Russian, Polish, Turkish, and Czechoslovakian; and an RJ-45 data port for software up-loads and on-site setup and programming.

Spectra III SE's variable speed capabilities range from a smooth, fast pan motion of 360 degrees per second to a smooth "creep" speed of 0.1 degree per second. The system is capable of 360 degrees rotation and has an "auto flip" feature that allows the dome to rotate 180 degrees and reposition itself for uninterrupted viewing of any subject that passes directly beneath the dome.

Optional diagnostic/installation tools include a remote monitor kit (**IPS-RMK**) and a remote monitor cable (**IPS-CABLE**). These accessories allow the installer to view video, control PTZ, and perform system setup and software upgrades at the installation site. The **IPS-RMK** is a stand-alone kit consisting of a 5.6-inch TFT-LCD monitor, Palm™ OS compatible handheld and interface cable, carrying case, and the remote monitor cable (**IPS-CABLE**).

Also available are video conversion modules for applications using unshielded twisted pair (UTP) and fiber. See *OPTIONAL ACCESSORIES* for information.



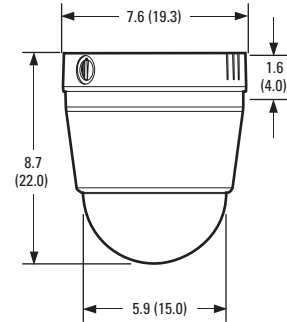
TECHNICAL SPECIFICATIONS

COMPONENT FEATURES

Back Box and Lower Dome

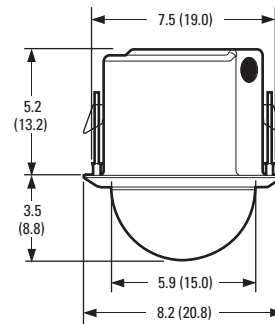
Surface Mount (Indoor)

- Built-in Memory Stores Camera/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



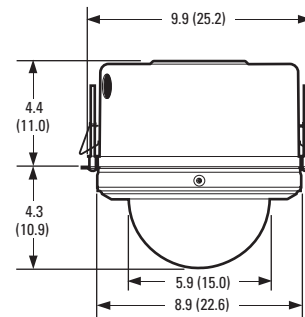
In-Ceiling (Indoor)

- Built-in Memory Stores Camera/Dome Settings
- Single Back Box for Suspended or Hard Ceiling Applications
- Requires 5.25-Inch Space Above Ceiling and 3.25 Inches Below
- 5.9-Inch Acrylic Bubble
- Minimum Ceiling Thickness 0.5-Inch; Maximum 1.75 Inches
- Quick Disconnect to Dome Drive
- Meets NEMA Type 1, IP40 Standards
- Aluminum Construction
- Suitable for Use in Environmental Air Handling Spaces



Environmental In-Ceiling

- Built-in Memory Stores Camera/Dome Settings
- Single Back Box for Hard Ceiling Applications
- Requires 4.4-Inch Space Above Ceiling and 4.3 Inches Below
- Includes Heater and Fan
- Minimum Ceiling Thickness 0.5-Inch; Maximum 1.75 Inches
- 5.9-Inch Acrylic Bubble
- Quick Disconnect to Dome Drive
- Meets NEMA Type 4X, IP66 Standards
- Aluminum Construction

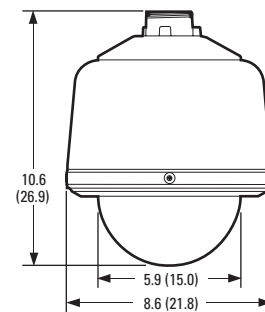


Standard and Environmental Pendant

- Standard and Environmental Models
- Built-in Memory Stores Camera/Dome Settings
- Standard Pendant Available in Black or Gray Finish; Environmental Pendant Gray Finish Only
- Quick Disconnect to Dome Drive
- Meets NEMA Type 4X, IP66 Standards
- Aluminum Construction
- 5.9-Inch Acrylic Bubble
- Environmental Model Includes Sun Shield, Fan, and Heater



(ENVIRONMENTAL DOME WITH SUN SHROUD SHOWN)



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

TECHNICAL SPECIFICATIONS

Dome Drive

- 150 Presets, 131 User-Definable and 19 Predefined
- $\pm 0.1^\circ$ Preset Accuracy
- Multilanguage Menus (English, Spanish, Portuguese, Italian, French, and German)
- Alternate Language Files (includes Russian, Polish, Turkish, and Czechoslovakian) Available as Optional Software Upload
- RJ-45 Data Port for Software Update and Setup
- On-Screen Compass, Tilt, and Zoom Display
- Password Protection
- $360^\circ/\text{sec}$ Pan Preset Speed and $200^\circ/\text{sec}$ 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 and Tilt – Continually decreases pan and tilt speeds in proportion to depth of zoom
- Variable Scan Speed – Scan speed can be programmable between $1\text{-}40^\circ/\text{sec}$
- Pan Motion Allows $0.1\text{-}150^\circ/\text{sec}$ Pan Speed
- Programmable Limit Stops for Auto/Random/Frame Scan Modes
- Auto-sensing Protocol (Coaxitron[®], RS-422 P and D); Accepts Competitive Control Protocol with Optional Translator Card
- Digital Position and Zoom Control and Feedback Via D Protocol
- Built-in Menu System for Setup of Programmable Functions
- “Auto Flip” Rotates Dome 180° at Bottom of Tilt Travel
- Programmable Zoom Speeds

MECHANICAL (Dome Drive Only)

Pan Movement	360° continuous pan rotation
Vertical Tilt	Unobstructed $+2^\circ$ to -92°
Manual Pan/Tilt Speeds	
Pan	$0.1^\circ\text{-}80^\circ/\text{sec}$ manual operation, $150^\circ/\text{sec}$ Turbo
Tilt	$0.1^\circ\text{-}40^\circ/\text{sec}$ manual operation
Preset Speeds	
Pan	$360^\circ/\text{sec}$
Tilt	$200^\circ/\text{sec}$
	For variable-speed operation an appropriate controller is required. (With non-variable speed control, Spectra III [®] pan/tilt speed is $20^\circ/\text{sec}$)

ELECTRICAL

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

GENERAL

Construction		
Back Box		
Surface Mount	Plastic	
In-Ceiling	Aluminum	
Pendant	Aluminum	
Dome Drive	Aluminum, thermo plastic	
Bubble	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		0.75-inch conduit fitting
Surface Mount		Through 1.5-inch NPT pendant mount
Pendant		
Weight (approximate)		
Back Box		
Surface Mount	0.7 lb (0.32 kg)	2 lb (0.90 kg)
In-Ceiling	1.5 lb (0.68 kg)	2 lb (0.90 kg)
Environmental		
In-Ceiling	2.1 lb (0.95 kg)	3 lb (1.36 kg)
Standard Pendant	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	0.4 lb (0.18 kg)	1 lb (0.45 kg)
In-Ceiling	0.2 lb (0.09 kg)	1 lb (0.45 kg)
Pendant and		
Environmental		
In-Ceiling	0.6 lb (0.27 kg)	2 lb (0.90 kg)
Environment		
Surface Mount	Indoor	
In-Ceiling	Indoor	
Environmental In-Ceiling	Outdoor	
Pendant, Standard		
and Environmental	Indoor/outdoor	
Operating Temperature		
Surface Mount and		32° to 122°F (0° to 50°C)
Indoor In-Ceiling		(Assumes no wind chill factor)
Standard Pendant		113°F (45°C) absolute maximum;
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;
Minimum		122°F (50°C) sustained maximum
		-60°F (-51°C) absolute minimum; prevents
		icing at sustained minimum of -50°F (-45°C);
		de-ices 0.1 inch (2.5 mm) within 3 hours after
		power-up
Effective Projected		
Area (EPA)		72 square inches (without mount)
		118 square inches (with IWM Series mount)

CERTIFICATIONS/RATINGS/PATENTS

- CE, Class B
- UL Listed
- UL Listed to Canadian safety standards
- Complies with Argentina compliance requirements under Res. 92/98
- FCC, Class B
- U.S. Patents 5,931,432; 6,793,415 B2; 6,802,656 B2; 6,821,222 B2

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)

TECHNICAL SPECIFICATIONS

CAMERA/OPTICS

	Day/Night (23X)	Color (22X)	Black-White (22X)
Signal Format	NTSC (DD53CBW) PAL (DD53CBW-X)	NTSC (DD53C22) PAL (DD53C22-X)	EIA (DD53M22) CCIR (DD53M22-X)
Scanning System	2:1 Interlace	2:1 Interlace	2:1 Interlace
Image Sensor	1/4-inch CCD	1/4-inch EXview HAD™ CCD	1/4-inch EXview HAD™ CCD
Effective Pixels			
NTSC	724 (H) X 494 (V)	768 (H) X 494 (V)	768 (H) X 494 (V)
PAL	724 (H) X 582 (V)	752 (H) X 582 (V)	752 (H) X 582 (V)
Horizontal Resolution			
NTSC	>470 TV Lines	>470 TV Lines	>500 TV Lines
PAL	>470 TV Lines	>460 TV Lines	>500 TV Lines
Lens	F1.6 (f = 3.6-82.8 mm optical)	F1.6 (f = 4-88 mm optical)	F1.6 (f = 4-88 mm optical)
Zoom	23X optical, 10X digital	22X optical, 12X digital	22X optical, 12X digital
Zoom Speed (optical range)	2.9/4.2/5.8 seconds	2.4/3.9/6.3 seconds	2.4/3.9/6.3 seconds
Horizontal Angle of view	54° at 3.6 mm wide zoom; 2.5° at 82.8 mm telephoto zoom	47° at 4.0 mm wide zoom; 2.2° at 88 mm telephoto zoom	47° at 4.0 mm wide zoom; 2.2° at 88 mm telephoto zoom
Focus	Automatic with manual override	Automatic with manual override	Automatic with manual override
Maximum Sensitivity @35 IRE			
NTSC/EIA	0.08 lux at 1/2 sec (color) 0.3 lux at 1/60 sec shutter (B-W) 0.013 lux at 1/2 sec (B-W)	0.02 lux at 1/2 sec shutter	0.005 lux at 1/2 sec shutter
PAL/CCIR	0.08 lux at 1/1.5 sec (color) 0.3 lux at 1/50 sec shutter (B-W) 0.013 lux at 1/1.5 sec (B-W)	0.02 lux at 1/1.5 sec shutter	0.005 lux at 1/1.5 sec shutter
Sync System	Internal/AC line lock, phase adjustable via remote control, V-Sync	Internal/AC line lock, phase adjustable via remote control, V-Sync	Internal/AC line lock, phase adjustable via remote control, V-sync
White Balance	Automatic with manual override	Automatic with manual override	—
Shutter Speed	Automatic (electronic iris)/Manual	Automatic (electronic iris)/Manual	Automatic (electronic iris)/Manual
NTSC	1/2 ~1/30,000	1/2 ~1/30,000	1/2 ~1/30,000
PAL	1/1.5 ~1/30,000	1/1.5 ~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	1 Vp-p, 75 ohms	1 Vp-p, 75 ohms	1 Vp-p, 75 ohms
Video Signal to Noise	>50 dB	>50 dB	>48 dB
Wide Dynamic Range	80X	—	—

WINDOW BLANKING

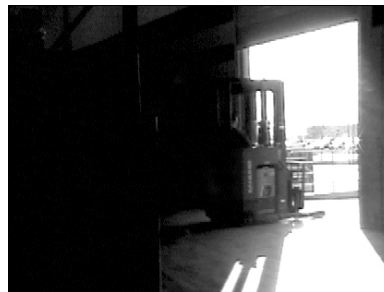
Window blanking allows a user to program up to eight, four-sided, user-defined areas that cannot be viewed by the operator of the dome system. A blanked area will move with pan and tilt functions and automatically adjust in size as the lens zooms telephoto and wide.



BEFORE



AFTER



BEFORE



AFTER

WIDE DYNAMIC RANGE

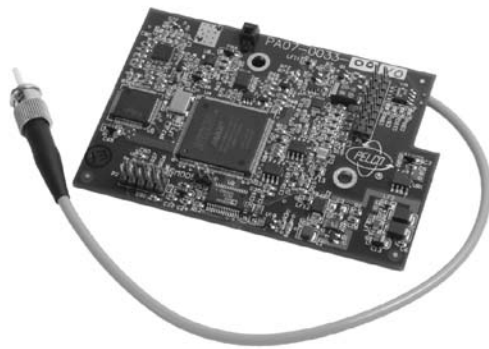
The Wide Dynamic Range (WDR) setting balances the brightest and darkest sections of a scene to produce a picture that provides more detail. The range from the darkest to the brightest sections of the scene is 80X more when WDR is ON than when OFF.

TECHNICAL SPECIFICATIONS

OPTIONAL ACCESSORIES

DD5-FM	Fixed camera mount adapter. Interchangeable with all Spectra III dome drives.
IPS-RMK	Remote monitor kit. Stand-alone kit consisting of a 5.6-inch TFT-LCD monitor, Palm™ OS compatible handheld, cables and carrying case. Allows viewing of camera video, local PTZ control, system setup, and system software upgrades at any installed dome.
IPS-CABLE	Remote monitor cable and software kit consisting of the Spectra III remote monitor interface cable and necessary software for use with a PC (Windows® 95, 98, Me, 2000), Palm™ OS compatible handheld or iPaq™ Series Pocket PC. See www.pelco.com for a list of compatible devices.
IPS-RDPE-2*	Remote data port. 24 VAC, wall/pole mount video/data breakout box. Allows ground-level control/programming and Spectra III OS software upgrades when used with the IPS-RMK or IPS-CABLE.
TXB Series*	Translator boards for AD Manchester, Bosch (Philips, Burle), Sensormatic, Vicon, and NTCIP protocols.
VC-UTP	Converts video for use with unshielded twisted pair (UTP); maximum distance to passive receiver 500 feet (152 m). Plugs into TXB connector in Spectra back box. Coaxitron-ready when used with passive receiver. Works with all major suppliers of UTP modules. Not for use in conjunction with TXB boards.
FS85011*	Fiber transmitter sends one unidirectional composite video channel and one bidirectional data channel over one multimode or single-mode fiber optical cable.

*If TXB or FS85011 boards are installed, remote upload of system software will not be possible.



FS85011 FIBER MODULE

RECOMMENDED MOUNTS

Surface Mount Domes

PASMB	Pendant adapter for surface mount dome, black
SD53SM-P	2' x 2' drop ceiling panel for BB53-SMW and BB53T-SMW series back boxes. Replaces 2' x 2' ceiling tile. Aluminum construction.

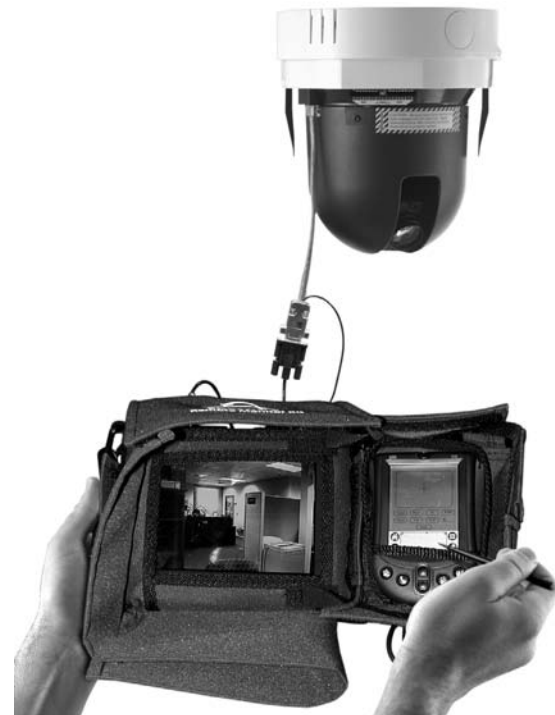
In-Ceiling Domes

SD5-P	2' x 2' drop ceiling panel, aluminum construction. Replaces 2' x 2' ceiling tile.
SCA1	Support rails for BB53-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.

**Not suitable for use with heavy-duty, pressurized, or stainless steel Spectra domes.



IPS-RMK REMOTE MONITOR KIT

SYSTEM MODELS AND RELATED PRODUCTS

SYSTEM MODEL NUMBERS

Type	Back Box Color	Lower Dome	23X Day/Night*	22X Color*	22X Black-White*
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	Black	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-SMB Surface mount, black	DD53CBW Day/Night (NTSC) camera (23X)	LD53SMB-0 Smoked, surface, black
BB53-SMW Surface mount, white	DD53CBW-X Day/Night (PAL) camera (23X)	LD53SMB-1 Clear, surface, black
BB53-F In-ceiling, black	DD53C22 Color (NTSC) camera (22X)	LD53SMB-2 Chrome, surface, black
BB53-F-E In-ceiling, black, environmental	DD53C22-X Color (PAL) camera (22X)	LD53SMB-3 Gold, surface, black
BB53-PB Pendant mount, black, standard	DD53M22 Black-White (EIA) camera (22X)	LD53SMW-0 Smoked, surface, white
BB53-PG Pendant mount, gray, standard	DD53M22-X Black-White (CCIR) camera (22X)	LD53SMW-1 Clear, surface, white
BB53-PG-E Pendant mount, gray, environmental	DD5-FM Removable, fixed mount bracket only (camera and lens not included). Interchangeable with all Spectra III dome drives.	LD53SMW-2 Chrome, surface, white
		LD53SMW-3 Gold, surface, white
		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).
 DD5-FM is ideal for use with Pelco's CCC1380/CCC1390/MCC1380 Series cameras with selected Pelco lenses.

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

****Not recommended for outdoor use due to possible light reflections.



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