



# Spectra III™ Series Dome Systems

## HIGH-PERFORMANCE INTEGRATED DOME SYSTEMS

### Product Features

- Auto Focus, High-Resolution Integrated LowLight™ Color Camera/Optics Package
- 18X Day/Night Camera (SD5318 Series)
  - Freeze Frame Between Presets
  - One Dynamic Window Blank
- 16X Color Camera (SD53TC Series)
- Zone Blanking
- Camera Title Overlay, 20 User-Definable Characters
- RJ-45 Data Port for Software Upgrades
- On-Screen Compass and Tilt Display
- Multilanguage On-Screen Menus
- Password Protection
- Integral, Autosensing, Multi-Protocol Receiver/Driver
- 5.9-inch Acrylic Bubble
- “Auto Flip” Dome Rotation
- Quick Disconnect Dome Drive
- One Pattern
- Built-in Surge and Limited Lightning Protection



IN-CEILING MODEL



ENVIRONMENTAL PENDANT  
MODEL SD53TC-PG-E0  
(SHOWN WITH SWM-GY WALL MOUNT)

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

The **Spectra III™ Series Dome System** is a cost-effective alternative to Pelco’s popular Spectra III™ SE Series Dome System. The Integrated Dome System consists of a back box, dome drive, and lower dome. Components may be ordered as a complete system or separately. This flexibility allows for future system upgrades. The **Spectra III** can be upgraded with the Spectra III SE dome drive, giving the system all the programmable features of the Spectra III SE, excluding built-in back box memory, relay and auxiliary functions.

**Spectra III Series** 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. All environmental in-ceiling models meet IP66 and NEMA Type 4X standards.

All cameras in **Spectra III Series** dome drives feature LowLight™ Technology. The day/night model also features an 18X lens, freeze frame between presets, and one programmable window blank. All models include on-screen compass and tilt display; multilanguage 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 uploads and on-site setup and programming.

**Spectra III** variable speed capabilities range from a smooth, fast pan motion of 250 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.



C2446 / REVISED 1-06



U.S. Patents 5,931,432; 6,793,415 B2; 6,802,656 B2; 6,821,222 B2

International Standards  
Organization Registered Firm;  
ISO 9001 Quality System



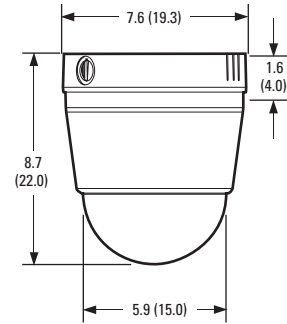
# TECHNICAL SPECIFICATIONS

## COMPONENT FEATURES

### Back Box and Lower Dome

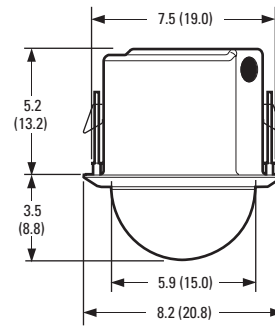
#### Surface Mount (Indoor)

- 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



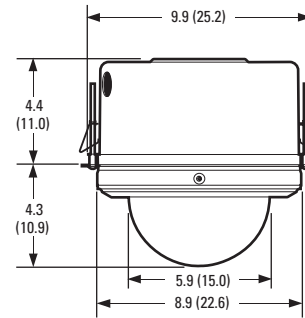
#### In-Ceiling (Indoor)

- 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

- 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

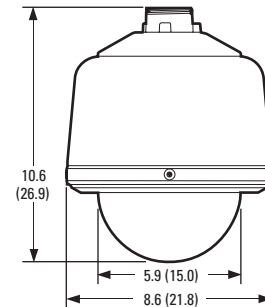


#### Standard and Environmental Pendant

- Standard and Environmental Models
- 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

- 99 Presets, 80 User-Definable and 19 Predefined
- $\pm 0.25^\circ$  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
- 250°/sec Pan Preset Speed and 200°/sec Tilt Preset Speed
- Rotating Discreet Liner with Sealed Fixed Bubble
- Eight Zones (programmable in size) Can Be Labeled with Up to 20 Characters Each or Set to Output Blank Video
- Programmable Locations of Labels and On-Screen Displays
- Patterns – One on-screen, user-defined programmable pattern. 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 1-40°/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); 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
- One Programmable Blank Window (DD53CBW18)
- Freeze Frame Between Presets (DD53CBW18)

## 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		
Indoor In-Ceiling		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 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)

# TECHNICAL SPECIFICATIONS

## 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	250°/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	1.25 A

## CAMERA/OPTICS

	Color (16X)	Day/Night (18X)
Signal Format	NTSC ( <b>DD53TC16</b> ) PAL ( <b>DD53TC16-X</b> )	NTSC ( <b>DD53CBW18</b> ) PAL ( <b>DD53CBW18-X</b> )
Scanning System	2:1 interlace	2:1 interlace
Image Sensor	1/4-inch interline transfer CCD	1/4-inch CCD
Effective Pixels		
NTSC	768 (H) X 494 (V)	724 (H) X 494 (V)
PAL	752 (H) X 582 (V)	724 (H) X 582 (V)
Horizontal Resolution		
NTSC	>470 TV Lines	>470 TV Lines
PAL	>460 TV Lines	>470 TV Lines
Lens	F1.4 (f = 4-64 mm optical) 16X optical zoom, 8X digital zoom	F1.6 (f = 3.8-68.4 mm optical) 18X optical zoom, 10X digital zoom
Zoom Speed (optical range)	1.9/3.6/6.0 seconds	2.9/4.2/5.8 seconds
Horizontal Angle of view	43° at 4 mm wide zoom; 3° at 64 mm telephoto zoom	51° at 3.8 mm wide zoom; 3° at 68.4 mm telephoto zoom
Focus	Automatic with manual override	Automatic with manual override
Maximum Sensitivity @35 IRE		
NTSC	0.05 lux at 1/2 sec	0.08 lux at 1/2 sec ( <b>color</b> ) 0.3 lux at 1/60 sec shutter ( <b>B-W</b> ) 0.013 lux at 1/2 sec ( <b>B-W</b> )
PAL	0.05 lux at 1/1.5 sec	0.08 lux at 1/1.5 sec ( <b>color</b> ) 0.3 lux at 1/50 sec shutter ( <b>B-W</b> ) 0.013 lux at 1/1.5 sec ( <b>B-W</b> )
Sync System	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
NTSC	1/2 ~1/30,000	1/2 ~1/30,000
PAL	1/1.5 ~1/30,000	1/1.5 ~1/30,000
Iris Control	Automatic with manual override	Automatic with manual override
Gain Control	Automatic with manual override	Automatic/OFF
Video Output	1 Vp-p, 75 ohms	1 Vp-p, 75 ohms
Video Signal to Noise	>50 dB	>50 dB

## 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:

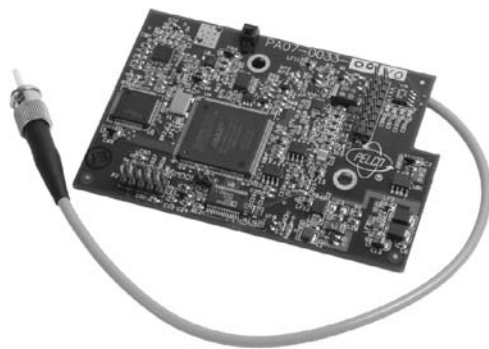
- NEMA Type 4X, IP66 when installed properly (BB53T-F-E, BB53T-PB, BB53T-PG, and BB53T-PG-E)
- NEMA Type 1, IP40 (BB53T-SMW, BB53T-SMB and BB53T-F)

# 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 <a href="http://www.pelco.com">www.pelco.com</a> 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), Sensomatic, 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, it is not possible to upgrade system operating software through the remote data port (IPS-RDPE-2).



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.

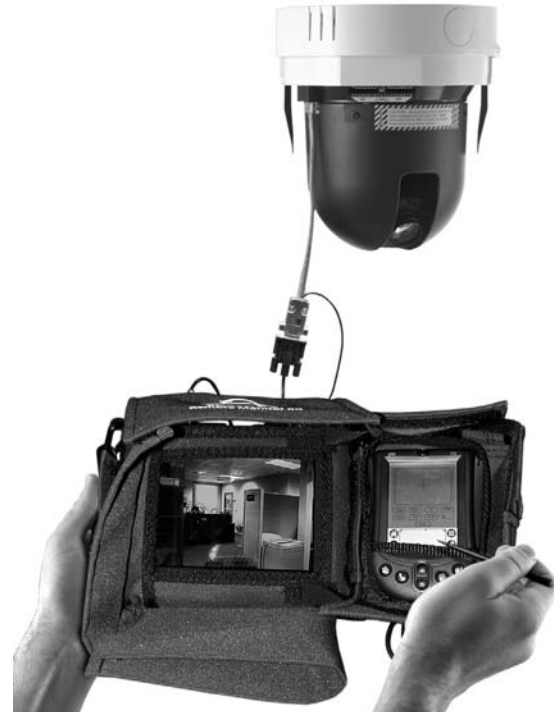
### In-Ceiling Domes

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	16X Color*	18X Day/Night*
Surface Mount	White	Smoked	SD53TC-SMW-0	SD5318-SMW-0
		Clear	SD53TC-SMW-1	SD5318-SMW-1
		Chrome	SD53TC-SMW-2	SD5318-SMW-2
		Gold	SD53TC-SMW-3	SD5318-SMW-3
	Black	Smoked	SD53TC-SMB-0	SD5318-SMB-0
		Clear	SD53TC-SMB-1	SD5318-SMB-1
		Chrome	SD53TC-SMB-2	SD5318-SMB-2
		Gold	SD53TC-SMB-3	SD5318-SMB-3
In-Ceiling, Indoor	Black	Smoked	SD53TC-F0	SD5318-F0
		Clear	SD53TC-F1	SD5318-F1
		Chrome	SD53TC-F2	SD5318-F2
		Gold	SD53TC-F3	SD5318-F3
In-Ceiling, Environmental**	Black	Smoked	SD53TC-F-E0	SD5318-F-E0
		Clear	SD53TC-F-E1	SD5318-F-E1
Pendant, Standard	Black	Smoked	SD53TC-PB-0	SD5318-PB-0
		Clear	SD53TC-PB-1	SD5318-PB-1
		Chrome	SD53TC-PB-2	SD5318-PB-2
		Gold	SD53TC-PB-3	SD5318-PB-3
	Lt. Gray	Smoked	SD53TC-PG-0	SD5318-PG-0
		Clear	SD53TC-PG-1	SD5318-PG-1
		Chrome	SD53TC-PG-2	SD5318-PG-2
		Gold	SD53TC-PG-3	SD5318-PG-3
Pendant, Environmental**	Lt. Gray	Smoked	SD53TC-PG-E0	SD5318-PG-E0
		Clear	SD53TC-PG-E1	SD5318-PG-E1

\*For PAL models add "-X" suffix to part number. (Example: SD53TC16-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***
BB53T-SMB Surface mount, black	DD53TC16 Color (NTSC) camera (16X)	LD53SMB-0 Smoked, surface, black
BB53T-SMW Surface mount, white	DD53TC16-X Color (PAL) camera (16X)	LD53SMB-1 Clear, surface, black
BB53T-F In-ceiling, black	DD53CBW18 Day/night (NTSC) camera (18X)	LD53SMB-2 Chrome, surface, black
BB53T-F-E In-ceiling, black, environmental	DD53CBW18-X Day/night (PAL) camera (18X)	LD53SMB-3 Gold, surface, black
BB53T-PB Pendant mount, black, standard	DD5-FM Removable fixed mount bracket only (camera and lens not included).	LD53SMW-0 Smoked, surface, white
BB53T-PG Pendant mount, gray, standard	Interchangeable with all Spectra III dome drives.	LD53SMW-1 Clear, surface, white
BB53T-PG-E Pendant mount, gray, environmental		LD53SMW-2 Chrome, surface, white
		LD53SMW-3 Gold, surface, white
<b>Notes:</b> To order a fixed mount dome system refer to the component models above and select one each of the following: back box (BB53T-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.		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****		

\*\*\*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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