Spectra III™ Series Dome Systems
HIGH-PERFORMANCE INTEGRATED DOME SYSTEMS

Product Features

- Auto Focus, High-Resolution Integrated LowLight™ Color Camera/Optics Package
- 16X Optical and 8X Digital Zoom (128X Total)
- Zone Blanking
- RJ-45 Data Port for Software Upgrades
- On-Screen Compass and Tilt Display
- Multilanguage On-Screen Menus
- Password Protection
- Integral, Auto-Sensing, 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
- Third-Party Fiber Modules
- 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 **Spectra III** features multiple back box configurations and a high-resolution LowLight™ Color dome drive with a 128X zoom lens, and programmable software.

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.

In additon to indoor in-ceiling and indoor/outdoor pendant back boxes, two new back box models have been added to the **Spectra III** 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. All pendant and environmental in-ceiling models are environmentally sealed to meet IP66 and NEMA Type 4X standards.

The **Spectra III** dome systems feature many new software enhancements including password protection to prevent unauthorized users from changing dome drive settings.

Other new features include on-screen compass and tilt display; multilanguage 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 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, PDA 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.

DataFAX
SPEC: 22446
MANUAL: See DataFAX Catalog #2

C2446 / REVISED 10-03

IP66

℃ UL US
LISTED

U.S. Patent 5,931,432

International Organization
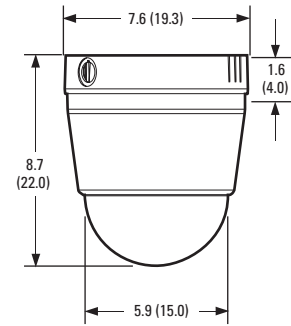for Standardization;
Registered ISO 9001

ISO 9001 CERTIFIED
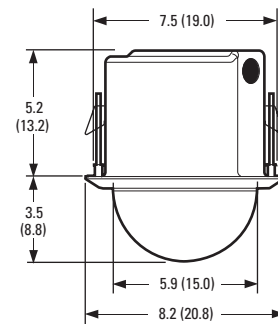
COMPONENT FEATURES

Surface Mount (Indoor), Back Box and Lower Dome

- Available in Black or White Finish
- Installs Quickly and Easily to Any Type of Ceiling
- Quick Disconnect to Dome Drive
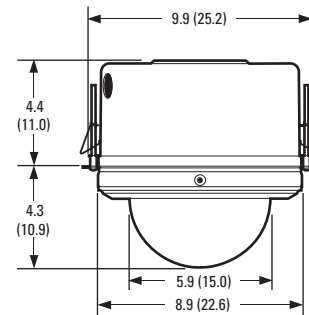- Injection-Molded Plastic
- 5.9-Inch Acrylic Bubble

In-Ceiling (Indoor), Back Box and Lower Dome

- 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, Back Box and Lower Dome

- 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
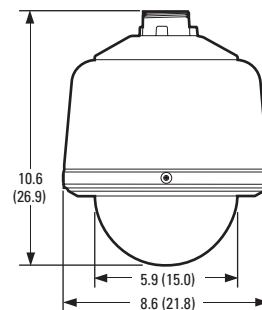- Meets NEMA Type 4X, IP66 Stardards
- Aluminum Construction

Standard and Environmental Pendant, Back Box and Lower Dome

- 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.

Dome Drive

- 40 Presets with Camera Settings and Labels
- ±0.25° Preset Accuracy
- Multilanguage Menus (English, Spanish, Portuguese, Italian, French, and German)
- Alternate Language Files (includes Russian, Polish, Turkish, Czechoslovakian, and Dutch) 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

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	0.75-inch conduit fitting
Pendant	Through 1.5-inch NPT pendant mount

Weight (approximate)

	Unit	Shipping
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)
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	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 In-Ceiling Indoor Standard Pendant	32° to 122°F (0° to 50°C) (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) ~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	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	1.25A

CERTIFICATIONS/RATINGS/PATENTS

- CE, Class B
- UL Listed
- UL Listed to Canadian safety standards
- FCC, Class B
- U.S. Patent 5,931,432

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)

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, PDA 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), PDA 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, Philips (Burle), Sensormatic, and Vicon® 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.

FIBER COMPATIBLE PRODUCTS

Fiber optic video transmitter/data receiver modules that plug directly into Spectra III SE and Spectra III back boxes are available through various manufacturers. Consult your fiber optics vendor for models and compatibility. Fiber optic modules cannot be used with TXB translator boards or VC-UTP.

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.

IPS-RMK REMOTE MONITOR KIT

TECHNICAL SPECIFICATIONS

CAMERA/OPTICS

	DD53TC16	DD53TC16-X
Signal Format	NTSC	PAL
Scanning System	2:1 interlace	2:1 interlace
Image Sensor	1/4-inch interline transfer CCD	1/4-inch interline transfer CCD
Effective Pixels	768 (H) x 494 (V)	752 (H) x 582 (V)
Horizontal Resolution	470 TV lines	460 TV lines
Lens	f1.4 (f = 4-64 mm optical, 16X optical zoom, 8X electronic zoom)	f1.4 (f = 4-64 mm optical, 16X optical zoom, 8X electronic zoom)
Zoom Speeds (optical range)	1.9/3.6/6.0 seconds	1.9/3.6/6.0 seconds
Horizontal Angle of View	43° at 4 mm wide zoom; 3° at 64 mm telephoto zoom	43° at 4 mm wide zoom; 3° at 64 mm telephoto zoom
Focus	Automatic with manual override and preset capability	Automatic with manual override and preset capability
Maximum Sensitivity (35 IRE)	0.05 lux 1/2-second shutter speed	0.05 lux 1/1.5-second shutter speed
Sync System	AC line lock, phase adjustable via remote control, V-Sync	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 1/2 - 1/30,000	Automatic (electronic iris)/manual 1/1.5 - 1/30,000
Iris Control	Automatic with manual override	Automatic with manual override
Gain Control	Automatic with manual override	Automatic with manual override
Video Output	1 Vp-p, 75 ohms	1 Vp-p, 75 ohms
Signal to Noise Ratio	>46 dB	>46 dB

SYSTEM MODEL NUMBERS

Type	Back Box Color	Lower Dome	16X Color (NTSC)	16X Color (PAL)
Surface Mount	White	Smoked	SD53TC-SMW-0	SD53TC-SMW-0-X
		Clear	SD53TC-SMW-1	SD53TC-SMW-1-X
		Chrome	SD53TC-SMW-2	SD53TC-SMW-2-X
		Gold	SD53TC-SMW-3	SD53TC-SMW-3-X
	Black	Smoked	SD53TC-SMB-0	SD53TC-SMB-0-X
		Clear	SD53TC-SMB-1	SD53TC-SMB-1-X
		Chrome	SD53TC-SMB-2	SD53TC-SMB-2-X
		Gold	SD53TC-SMB-3	SD53TC-SMB-3-X
In-Ceiling, Indoor	Black	Smoked	SD53TC-F0	SD53TC-F0-X
		Clear	SD53TC-F1	SD53TC-F1-X
		Chrome	SD53TC-F2	SD53TC-F2-X
		Gold	SD53TC-F3	SD53TC-F3-X
In-Ceiling, Environmental**	Black	Smoked	SD53TC-F-E0	SD53TC-F-E0-X
		Clear	SD53TC-F-E1	SD53TC-F-E1-X
Pendant, Standard	Black	Smoked	SD53TC-PB-0	SD53TC-PB-0-X
		Clear	SD53TC-PB-1	SD53TC-PB-1-X
		Chrome	SD53TC-PB-2	SD53TC-PB-2-X
		Gold	SD53TC-PB-3	SD53TC-PB-3-X
	Lt. Gray	Smoked	SD53TC-PG-0	SD53TC-PG-0-X
		Clear	SD53TC-PG-1	SD53TC-PG-1-X
		Chrome	SD53TC-PG-2	SD53TC-PG-2-X
		Gold	SD53TC-PG-3	SD53TC-PG-3-X
Pendant, Environmental**	Lt. Gray	Smoked	SD53TC-PG-E0	SD53TC-PG-E0-X
		Clear	SD53TC-PG-E1	SD53TC-PG-E1-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	LD53SMB-0	Smoked, surface, black
BB53T-SMW	Surface mount, white	DD53TC16-X	Color (PAL) camera	LD53SMB-1	Clear, surface, black
BB53T-F	In-ceiling, black	DD5-FM	Removable fixed mount bracket only (camera and lens not included). Interchangeable with all Spectra III dome drives.	LD53SMB-2	Chrome, surface, black
BB53T-F-E	In-ceiling, black, environmental			LD53SMB-3	Gold, surface, black
BB53T-PB	Pendant mount, black, standard			LD53SMW-0	Smoked, surface, white
BB53T-PG	Pendant mount, gray, standard			LD53SMW-1	Clear, surface, white
BB53T-PG-E	Pendant mount, gray, environmental			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 (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 CCC1370H-2, CCC1370H-2X, and MCC1370H-2 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.