

# Spectra® HD Series Network Dome System

## HIGH DEFINITION PAN/TILT/ZOOM HIGH-SPEED DOME

### Product Features

- Up to 1280 x 960 Resolution
- 4:3 or 16:9 Aspect Ratio; 960p at 20 Images per Second (ips), 720p at 30 ips
- 1.3 Megapixel (MPx), 18X Optical, Wide Dynamic Range (WDR) Camera
- Ability to Control and Monitor Video Over IP Networks
- Autotracking and Adaptive Motion Detection
- 2 Simultaneous Video Streams: Dual H.264 and Scalable MJPEG
- 360° Continuous Pan Rotation at 400° per Second
- Supported Protocols: TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, NTP, and More
- Power over Ethernet (PoE) IEEE 802.3af
- USB Expansion Slots for Alarms and Audio Accessories
- 16 Preset Tours, 255 Dome Presets, 8 Privacy Zones

Pelco takes its industry-leading Spectra® Series dome into the world of high definition. **Spectra HD** delivers crystal-clear, live streaming images over the Internet using a standard Web browser (Microsoft® Internet Explorer® or Mozilla® Firefox®). With four times the resolution of standard definition domes, **Spectra HD** is an ideal solution to view details such as faces, license plates, tattoos, playing cards (in casinos), or other specific features.

**Spectra HD** supports High-Profile H.264 compression, a vast improvement in quality over MPEG-4 and 20 times more efficient than M-JPEG. The dome system features open architecture connectivity for third-party software recording solutions allowing integration into virtually any IP-based HD system. It is also compatible with Digital Sentry® video management systems. As with all Pelco IP camera solutions, **Spectra HD** is Endura Enabled™ to record, manage, configure, and view multiple live streams. When connected to an Endura® HD network-based video security system, the dome system has access to EnduraStor™ and EnduraView™ for optimized image quality and bandwidth efficiency.

**Spectra HD** features the same ease of installation and ease of maintenance that you have come to expect from Spectra. Each dome system consists of a back box, a dome drive, and a lower dome.



**Spectra HD** includes a choice of four back box models: in-ceiling, environmental in-ceiling, pendant, and environmental pendant. All environmental models meet NEMA Type 4X, IP66 when properly installed.

**Spectra HD** dome system includes many software enhancements that increase performance and make configuration and operation easy. An internal scheduling clock allows for the scheduling of presets and patterns. Window blanking enables a user to configure up to eight, four-sided, user-defined privacy areas. Password protection prevents unauthorized users from changing the system settings. Intuitive multilingual on-screen configuration can be displayed in English, Spanish, Portuguese, Italian, French, German, Russian, Polish, and Turkish.

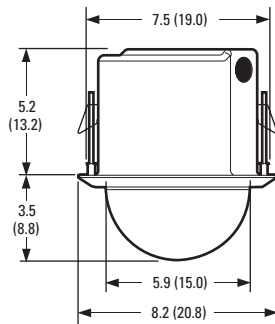
**Spectra HD** features include variable speed capabilities, which range from a smooth, fast pan motion of 400 degrees per second to a smooth “creep” speed of 0.1 degree per second. The system is capable of continuous 360 degrees rotation, and it has an “auto flip” feature that allows the dome to rotate 180 degrees and reposition itself for uninterrupted viewing of any subject that passes directly beneath the dome.



## SOFTWARE FEATURES

- 255 Presets
- 16 Tours
- $\pm 0.1^\circ$  Preset Accuracy
- Multilingual Menus (English, Spanish, Portuguese, Italian, German, French, Russian, Polish, and Turkish)
- Password Protection
- $400^\circ/\text{sec}$  Pan Preset Speed and  $200^\circ/\text{sec}$  Tilt Preset Speed
- Rotating Discreet Liner with Sealed Fixed Bubble
- 8 Privacy Zones, Configurable in Size
- "Auto Flip" Feature Rotates Dome  $180^\circ$  at Bottom of Tilt Travel
- Configurable Park with Actions
- Proportional Pan/Tilt Continually Decreases Pan/Tilt Speeds in Proportion to Depth of Zoom

## BACK BOX FEATURES

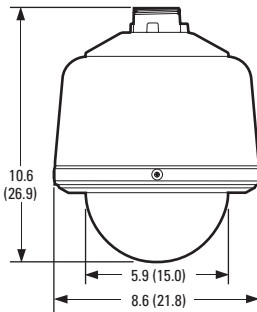


### In-Ceiling (Indoor)

- Single Back Box for Suspended or Hard Ceiling Applications
- Requires 5.25-Inch Space Above Ceiling and 3.25 Inches Below
- Minimum Ceiling Thickness 0.5-Inch; Maximum 1.75 Inches
- Quick Disconnect to Dome Drive
- Aluminum Construction
- Suitable for Use in Environmental Air Handling Spaces

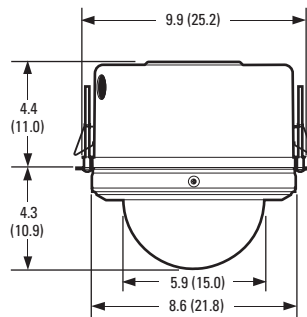


(ENVIRONMENTAL DOME WITH SUN SHROUD SHOWN)



### Standard and Environmental Pendant

- Standard and Environmental Models
- Standard Pendant Available in Black or Gray Finish; Environmental Pendant Available in Gray Finish Only
- Quick Disconnect to Dome Drive
- Aluminum Construction
- Environmental Model Includes Sun Shield, Fan, and Heater



### 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
- Quick Disconnect to Dome Drive
- Aluminum Construction

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

## CAMERA

Sensor Type	1/3-inch CCD
Optical Zoom	18X
Maximum Resolution	1280 x 960
Lens	f/1.6 (focal length, 4.7 ~ 84.6 mm optical)
Aspect Ratios	4:3 or 16:9
Light Sensitivity	f/1.6; 2,850°K; SNR >24dB
Color (33 ms)	0.70 lux
Color (250 ms)	0.07 lux
Mono (33 ms)	0.25 lux
Mono (250 ms)	0.02 lux
Day/Night Capabilities	Yes
IR Cut Filter	Yes
IR Trace	Curves 850 nm and 950 nm
Wide Dynamic Range	60 dB
Iris Control	Auto iris with manual override
Backlight Compensation	Yes

## VIDEO

Video Encoding	H.264 high, main, or base profile and MJPEG
Video Streams	Up to 2 simultaneous streams; the second stream is variable based on the setup of the primary stream
Frame Rate	Up to 30, 25, 24, 15, 12.5, 12, 10, 8, 7.5, 6, 5, 4, 3, 2.5, 2, 1 (dependent upon coding, resolution, and stream configuration)

Available Resolutions

Resolution				MJPEG		H.264 High Profile (IP GOP structure)	
MPx	Width	Height	Aspect Ratio	Maximum IPS	Recommended bitrate (Mbps)	Maximum IPS	Recommended bitrate (Mbps)
1.30	1280	960	4:3	20	12.00	20	3.00
0.92	1280	720	16:9	30	12.00	30	2.90
0.49	800	608	4:3	20	5.15	20	1.75
0.31	640	480	4:3	20	3.25	20	1.20
0.23	640	352	16:9	30	3.60	30	1.15
0.18	480	368	4:3	20	1.85	20	0.75
0.13	480	272	16:9	30	2.05	30	0.75
0.08	320	240	4:3	20	0.80	20	0.40
0.06	320	176	16:9	30	0.90	30	0.35

Supported Protocols	TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4, SNMP v2c/v3, QoS, HTTP, HTTPS, LDAP (client), SSH, SSL, SMTP, FTP, mDNS (Bonjour®), and 802.1x (EAP)
Users	<ul style="list-style-type: none"> <li>Unicast: Up to 20 simultaneous users depending on resolution settings (2 guaranteed streams)</li> <li>Multicast: Unlimited users H.264</li> </ul>
Security Access	Password protected
Software Interface	Web browser view and setup, up to 16 cameras
Pelco System Integration	Endura 2.0 (or later) Digital Sentry 4.2 (or later)
Open IP Integration	Pelco IP camera API
Minimum System Requirements	<ul style="list-style-type: none"> <li>Processor: Intel® Core™ 2 Duo microprocessor, 2.6 GHz</li> <li>Operating System: Windows® XP, Windows Vista®, or Mac® OS X 10.4 (or later)</li> <li>Memory: 2 GB RAM</li> <li>Network Interface Card: 100 megabits (or greater)</li> <li>Monitor: Minimum of 1024 x 768 resolution, 16- or 32-bit pixel color resolution</li> <li>Web Browser*: Internet Explorer 7.0 (or later) or Firefox 3.5 (or later); Internet Explorer 8.0 (or later) is recommended for configuring analytics</li> <li>Media Player†: Pelco Media Player‡ or QuickTime® 7.6.5 for Windows XP, Windows Vista, or QuickTime 7.6.4 for Mac OS X 10.4</li> </ul>

\*Internet Explorer is not supported by Mac OS X 10.4.

†This product is not compatible with QuickTime version 7.6.4 for Windows XP or Windows Vista. If you have this version installed on your PC, you will need to upgrade to QuickTime version 7.6.5.

‡Pelco Media Player is recommended for control, smoothness, and reduced latency as compared to QuickTime.

## GENERAL

Construction	
Back Box	Aluminum
Dome Drive	Aluminum, thermo plastic
Lower Dome	Acrylic
Light Attenuation	
Smoked	f/0.5 light loss
Clear	Zero light loss
Cable Entry (back box)	
In-Ceiling	0.75-inch conduit fitting
Pendant	Through 1.5-inch NPT pendant mount
Weight (approximate)	Unit                      Shipping
In-Ceiling	5.2 lb (2.4 kg)        8 lb (3.6 kg)
Environmental In-Ceiling	6.2 lb (2.8 kg)        10 lb (4.5 kg)
Standard Pendant	6.5 lb (3.0 kg)        11 lb (5.0 kg)
Environmental Pendant	7.6 lb (3.5 kg)        12 lb (5.4 kg)
Environment	
In-Ceiling	Indoor
Environmental In-Ceiling	Outdoor
Pendant, Standard, and Environmental	Indoor/outdoor
Operating Temperature	
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, 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 -22°F (-30°C); de-ices 0.1 inch (2.5 mm) within 3 hours after power-up at -22°F (-30°C)
Effective Projected Area (EPA)	20.5 square inches (without mount), 47 square inches (with IWM Series mount)

## MECHANICAL

*(Dome Drive Only)*

Variable Speed	0.1° to 400°
Preset Accuracy	±0.1°
Pan Movement	360° continuous pan rotation
Vertical Tilt	+0° to -90°
Manual Pan/Tilt Speeds	
Pan	0.1° to 80°/sec manual operation, 150°/sec Turbo
Tilt	0.1° to 40°/sec manual operation
Preset Speeds	
Pan	400°/sec
Tilt	160°/sec

## ELECTRICAL

Ports	RJ-45 connector for 100Base-TX Auto MDI/MDI-X Autonegotiate/Manual setting
Cabling Type	Cat5 or better for 100Base-TX
Input Voltage	18 to 32 VAC; 24 VAC nominal 22 to 27 VDC; 24 VDC nominal
Input Power	
24 VAC	23 VA nominal (without heater); 73 VA nominal (with heater)
24 VDC	0.7 A nominal (without heater); 3 A nominal (with heater)
PoE	IEEE802.3af (without heater)
Fuse	1.25 A

## CERTIFICATIONS/RATINGS/PATENTS

- CE, Class A\*
- FCC, Class A\*
- UL/cUL Listed\*
- C-Tick\*
- U.S. Patents 5,931,432; 6,793,415 B2; 6,802,656 B2; 6,821,222 B2; 7,161,615 B2
- Meets NEMA Type 4X and IP66 standards when installed properly (B5-F-E and B5-PG-E)\*

\*As of the date of this publication, these certifications are pending. Please consult the factory, our Web site at [www.pe/co.com](http://www.pe/co.com), or the most recent B.O.S.S.® update for the current status of certifications.

# MODEL NUMBERS

## SYSTEM MODEL NUMBERS

Type	Back Box Color	Lower Dome	HD, 1.3 MPx, 18X Color
In-ceiling, indoor	Black with white trim ring	Smoked	S5118-FW0
		Clear	S5118-FW1
In-ceiling, environmental	Black with black trim ring	Smoked	S5118-YB0
		Clear	S5118-YB1
Pendant, standard	Gray	Smoked	S5118-PG0
		Clear	S5118-PG1
	Black	Smoked	S5118-PB0
		Clear	S5118-PB1
Pendant, environmental	Gray	Smoked	S5118-EG0
		Clear	S5118-EG1

## COMPONENT MODEL NUMBERS

Back Box		Lower Dome		Dome Drive	
B5-F	HD, in-ceiling, gray	LDHQF-0	High-quality, smoked, in-ceiling	D5118	HD, 1.3 Mpx, 18X optical zoom
B5-F-E	HD, environmental in-ceiling, gray	LDHQF-1	High-quality, clear, in-ceiling		
B5-PG	HD, pendant, gray	LDHQPB-0	High-quality, smoked, pendant		
B5-PB	HD, pendant, black	LDHQPB-1	High-quality, clear, pendant		
B5-PG-E	HD, environmental pendant, gray				

## RECOMMENDED MOUNTS

### In-Ceiling Domes

SD5-P	2' x 2' drop ceiling panel, aluminum construction; replaces 2' x 2' ceiling tile
SCA1	Support rails for B5-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 application
MRCA	Ceiling 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

## RECOMMENDED POWER SUPPLIES

MCS Series	Indoor, 24 VAC power supply
WCS Series	Outdoor, 24 VAC power supply

Refer to individual power supply specifications for more information.

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