# 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.

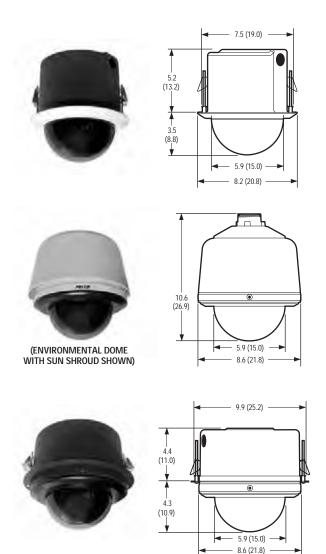


# **TECHNICAL SPECIFICATIONS**

#### **SOFTWARE FEATURES**

- 255 Presets
- 16 Tours
- ±0.1° Preset Accuracy
- Multilingual Menus (English, Spanish, Portuguese, Italian, German, French, Russian, Polish, and Turkish)
- Password Protection
- 400°/sec Pan Preset Speed and 200°/sec Tilt Preset Speed
- Rotating Discreet Liner with Sealed Fixed Bubble
- 8 Privacy Zones, Configurable in Size
- "Auto Flip" Feature Rotates Dome 180° 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**



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

#### 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

# 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

# **TECHNICAL SPECIFICATIONS**

#### **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

Curves 850 nm and 950 nm IR Trace

Wide Dynamic Range 60 dB

Auto iris with manual override Iris Control

**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	

TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4, SNMP v2c/v3, QoS, HTTP, HTTPS, LDAP (client), SSH, Supported Protocols

SSL, SMTP, FTP, mDNS (Bonjour®), and 802.1x (EAP)

Users

Unicast Up to 20 simultaneous users depending on resolution settings (2 guaranteed streams)

Multicast Unlimited users H.264 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

Intel® Core™ 2 Duo microprocessor, 2.6 GHz Processor

Operating System Windows® XP, Windows Vista®, or Mac® OS X 10.4 (or later)

2 GB RAM Memory

Network Interface Card 100 megabits (or greater)

Minimum of 1024 x 768 resolution, 16- or 32-bit pixel color resolution Monitor

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

Pelco Media Player<sup>‡</sup> or QuickTime<sup>®</sup> 7.6.5 for Windows XP, Windows Vista, or QuickTime 7.6.4 for Mac OS X 10.4 Media Player<sup>†</sup>

<sup>\*</sup>Internet Explorer is not supported by Mac OS X 10.4.

<sup>†</sup>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.

<sup>&</sup>lt;sup>‡</sup>Pelco Media Player is recommended for control, smoothness, and reduced latency as compared to QuickTime.

# **TECHNICAL SPECIFICATIONS**

#### **GENERAL**

Construction

Back Box Aluminum

Dome Drive Aluminum, thermo plastic

Lower Dome Acrylic

Light Attenuation

f/0.5 light loss Smoked Clear Zero light loss

Cable Entry (back box)

0.75-inch conduit fitting In-Ceiling

Pendant Through 1.5-inch NPT pendant mount Shipping

Weight (approximate) Unit In-Ceiling 5.2 lb (2.4 kg) Environmental In-Ceiling 6.2 lb (2.8 kg)

10 lb (4.5 kg) 6.5 lb (3.0 kg) Standard Pendant 11 lb (5.0 kg) **Environmental Pendant** 12 lb (5.4 kg) 7.6 lb (3.5 kg)

Environment

In-Ceiling Indoor Environmental In-Ceiling Outdoor

Pendant, Standard, and Environmental

Operating Temperature

32° to 122°F (0° to 50°C) In-Ceiling Standard Pendant (Assumes no wind chill factor)

Maximum 113°F (45°C) absolute maximum; 95°F (35°C)

Indoor/outdoor

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

8 lb (3.6 kg)

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

Pan Movement 360° continuous pan rotation

Vertical Tilt +0° to -90°

Manual Pan/Tilt Speeds

0.1° to 80°/sec manual operation, Pan

150°/sec Turbo

Tilt 0.1° to 40°/sec manual operation

Preset Speeds

400°/sec Pan Tilt 160°/sec

#### **ELECTRICAL**

Cabling Type

Input Voltage

Input Power

24 VAC

24 VDC

PoE

Fuse

Ports RJ-45 connector for 100Base-TX

Auto MDI/MDI-X

Autonegotiate/Manual setting Cat5 or better for 100Base-TX 18 to 32 VAC; 24 VAC nominal 22 to 27 VDC; 24 VDC nominal

> 23 VA nominal (without heater); 73 VA nominal (with heater) 0.7 A nominal (without heater); 3 A nominal (with heater)

IEEE802.3af (without heater)

1.25 A

# **MODEL NUMBERS**

### **SYSTEM MODEL NUMBERS**

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

### **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)\*

<sup>\*</sup>As of the date of this publication, these certifications are pending. Please consult the factory, our Web site at <a href="https://www.pelco.com">www.pelco.com</a>, or the most recent B.O.S.S.® update for the current status of certifications.