Spectra® IV IP Series Network Dome System

H.264, DIGITAL PAN/TILT/ZOOM HIGH-SPEED DOME

Product Features

- Ability to Control and Monitor Video Over IP Networks
- Simultaneous IP and Analog Video and Control
- H.264, MPEG-4, and MJPEG Compression
- Supported Protocols: TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4, SNMP, QoS, HTTP, HTTPS, LDAP (client), SSH, SSL, SMTP, FTP, and 802.1x (EAP)
- Multilevel Password Protection
- 3 Autofocus, High Resolution Integrated Camera/Optics Packages
- Autotracking
- Horizontal Zone and Window Blanking
- Sensitivity Down to 0.00018 lux PAL (36X Models)
- On-Screen Compass and Tilt Display
- Up to 2 Simultaneous Video Streams
- Web Viewing, up to 16 Cameras Simultaneously
- Open IP Standards

Spectra® IV IP dome systems incorporate all of the features and functions of Spectra IV (including analog), while allowing you to control and monitor video over an IP network from virtually anywhere in the world. Spectra IV IP is a high-speed dome with a built-in 100Base-TX network interface for live streaming to any network application.

Spectra IV IP supports two simultaneous video streams. The two streams can be compressed in MJPEG, MPEG-4, and H.264 formats across several resolution configurations. The streams can be configured in a variety of frame rates, bit rates, and group of pictures (GOP) structures for additional bandwidth administration. The H.264 compression video files are up to 20 times smaller than MJPEG, making network video storage more affordable.

Spectra IV IP allows you to view and control analog video while viewing, recording, and controlling network IP video. There is no need to abandon your current analog infrastructure if you are making the move to network video as a recording solution. Continue to monitor and control video in the analog domain while recording video in the network domain, and let Spectra IV IP's professional compression method do the work for you without the need for external encoders.

Spectra IV IP dome system consists of a back box, a dome drive, and a lower dome. These three system components are interchangeable with other Spectra IV IP dome systems, making retrofitting and application adjustments simple.

Spectra IV IP features several back box options. All back boxes feature built-in memory, which can be used to store camera and location-specific dome settings, including labels, presets, patterns, and zones.





- ONVIF v1.02 Conformant
- Bidirectional Full-Duplex Audio

All cameras in **Spectra IV IP** dome drives feature an EXview HAD™ imager for increased sensitivity and LowLight™ technology allowing the cameras to compensate for scenes where minimal light is present. Both the 29X and the 36X cameras feature built-in motion detection and advanced 128X wide dynamic range (WDR) that enables the system to compensate for scenes where dramatic contrasts in lighting are present. The 36X day/night camera's electronic image stabilization digitally reduces blurring of the camera image due to vibration caused by external sources, such as wind and traffic.

Web Interface

Spectra IV IP uses a standard Web browser for powerful remote setup and administration. Up to 16 cameras can be viewed on the same network.

Network protocols such as Secure Sockets Layer (SSL) configuration for security certificates, Secure Shell (SSH) for remote logon, and Quality of Service (QoS) for priority or guarantee data flow can be managed using a Web browser.

Video Systemization

Spectra IV IP easily connects to Pelco IP and hybrid systems such as Endura® version 1.5 (or later), MPEG-4; Endura version 2.0 (or later), H.264; Digital Sentry® version 7.3 (or later); DX8100 version 2.0 (or later); DX4700/D4800 Series 1.1 (or later); DX4700HD/DX4800HD Series v2.0 (or later); and DVR5100 version 1.5.4 (or later). The camera also features open architecture connectivity to third-party software. Pelco offers an application programming interface (API) and software developer's kit (SDK) for interfacing with Pelco's IP cameras.





CAMERA/OPTICS

	Day/Night (36X)	Day/Night (29X)	Day/Night (23X)		
Signal Format	NTSC (DD436) PAL (DD436-X)	NTSC (DD429) PAL (DD429-X)	NTSC (DD423) Pal (DD423-X)		
Scanning System	Interlace/Progressive selectable	Interlace/Progressive selectable	2:1 Interlace		
Image Sensor Effective Pixels	1/4-inch EXview HAD™	1/4-inch EXview HAD	1/4-inch EXview HAD		
NTSC PAL	768 (H) X 494 (V) 752 (H) X 582 (V)	768 (H) X 494 (V) 752 (H) X 582 (V)	768 (H) X 494 (V) 752 (H) X 582 (V)		
Horizontal Resolution NTSC PAL	>540 TV Lines >540 TV Lines	>540 TV Lines >540 TV Lines	540 TV Lines 540 TV Lines		
Lens	f/1.4 (focal length, 3.3 ~ 119 mm)	f/1.4 (focal length, 3.4 ~ 91.8 mm)	f/1.6 (focal length, 3.6 ~ 82.8 mm)		
Zoom	36X optical, 12X digital	29X optical, 12X digital	23X optical, 12X digital		
Zoom Speed (optical range)	3.2/4.6/6.6 seconds	3.2/4.6/6.6 seconds	2.9/4.2/5.8 seconds		
Horizontal Angle of view Focus	57.2° at 3.3 mm wide zoom; 1.7° at 119 mm telephoto zoom Automatic with manual override	57.2° at 3.4 mm wide zoom; 1.7° at 98.6 mm telephoto zoom Automatic with manual override	54° at 3.6 mm wide zoom; 2.5° at 82.8 mm telephoto zoom Automatic with manual override		
Maximum Sensitivity at 35 IRE NTSC/EIA PAL/CCIR	0.55 lux at 1/60 sec (color) 0.018 lux at 1/2 sec (color) 0.00018 lux at 1/2 sec (B-W) 0.45 lux at 1/50 sec (color)	0.55 lux at 1/60 sec (color) 0.018 lux at 1/2 sec (color) 0.00018 lux at 1/2 sec (B-W) 0.45 lux at 1/50 sec (color)	0.65 lux at 1/60 sec (color) 0.15 lux at 1/60 sec (B-W)		
,	0.015 lux at 1/1.5 sec (color) 0.00015 lux at 1/1.5 sec (B-W)	0.015 lux at 1/1.5 sec (color) 0.00015 lux at 1/1.5 sec (B-W)	0.55 lux at 1/50 sec (color) 0.12 lux at 1/50 sec (B-W)		
Sync System	Internal/AC line lock, phase adjustable using remote control, V-Sync	Internal/AC line lock, phase adjustable using remote control, V-Sync	Internal/AC line lock, phase adjustable using remote control, V-Sync		
White Balance	Automatic with manual override	Automatic with manual override	Automatic with manual override		
Shutter Speed NTSC PAL	Automatic (electronic iris)/Manual 1/2 ~ 1/30,000 1/1.5 ~ 1/30,000	Automatic (electronic iris)/Manual 1/2 ~ 1/30,000 1/1.5 ~ 1/30,000	Automatic (electronic iris)/Manual 1/2 ~ 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	>50 dB		
Wide Dynamic Range	128X	128X	_		
Electronic Image Stabilization	Integrated/Selectable	_	_		
Auto Sharpness	Integrated/Selectable	Integrated/Selectable	_		
Video Motion Detection	Integrated	Integrated	_		

VIDEO

Video Encoding H.264 base profile, MPEG-4, 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, 1 (dependent upon coding, resolution,

and stream configuration)

Available Resolutions

Resolution		MJPEG		H. 264 Base Profile		MPEG-4		
Width	Height	Format	Maximum IPS	Recommended Bit Rate	Maximum IPS	Recommended Bit Rate	Maximum IPS	Recommended Bit Rate
704	480	NTSC	30 ips	5.4 Mbps	30 ips	1.9 Mbps	30 ips	2.0 Mbps
352	240	NTSC	30 ips	1.3 Mbps	30 ips	0.5 Mbps	30 ips	0.6 Mbps
704	576	PAL	25 ips	5.4 Mbps	25 ips	1.9 Mbps	25 ips	2.0 Mbps

TCP/IP, UDP/IP (Unicast, Multicast IGMP), Supported Protocols UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4,

> SNMP, QoS, HTTP, HTTPS, LDAP (client), SSH, SSL, SMTP, FTP, and 802.1x (EAP)

Users

Unicast Up to 20 simultaneous users depending on

resolution settings (2 guaranteed streams)

Multicast Unlimited users H.264 or MPEG-4

Security Access Password protected

Software Interface Web browser view and setup, up to

16 cameras

Pelco System Integration Endura 1.5 or later (MPEG-4) or Endura 2.0 or

later (H.264); Digital Sentry 7.3 IP bundle 3 or

later; DX8100 Series 2.0 or later; DX4700/D4800 Series 1.1 or later; DX4700HD/DX4800HD Series v2.0 or later; and DVR5100 version 1.5.4 or later

Pelco API or ONVIF v1.02

Open API

Minimum System Requirements

Media Player[†]

Processor Intel® Pentium® 4 microprocessor, 1.6 GHz Microsoft® Windows® XP, Windows Vista®, Operating System Windows 7, or Mac® OS X 10.4 (or later)

512 MB RAM Memory

Network Interface Card 100 megabits (or greater)

Monitor Minimum of 1024 x 768 resolution, 16- or

32-bit pixel color resolution

Internet Explorer® 7.0 (or later) or Mozilla® Web Browser*

Firefox® 3.0 (or later)

Pelco Media Player or QuickTime® 7.6.5 for Windows XP, Windows Vista, or QuickTime

7.6.4 for Mac OS X 10.4

^{*}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.

DOME DRIVE FEATURES

36X and 29X Models

- 256 Presets
- ±0.1° Preset Accuracy
- Electronic Image Stabilization (36X model)
- · Auto Sharpness
- Multilingual Menus (English, Spanish, Portuguese, Italian, French, German, Russian, Polish, Turkish, and Czech)
- RJ-45 Data Port for Software Update and Setup
- · On-Screen Compass, Tilt, and Zoom Display
- · Password Protection
- 400°/sec Pan Preset Speed and 200°/sec Tilt Preset Speed
- Rotating Discreet Liner with Sealed Fixed Bubble
- · Window Blanking: Up to 8, Four-Sided, User-Defined Shapes
- 8 Zones (configurable in size) Can Be Labeled with up to 20 Characters Each or Set to Output Blank Video
- 7 Alarm Inputs
- 1 Auxiliary (Form C) Relay Output and 1 Open Collector Auxiliary Output (can be alternately configured to operate upon alarm)
- · Configurable Locations of Labels and On-Screen Displays
- Action on Alarm: Alarms Can Be Individually Configured for 3 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 Configured State After Alarm Acknowledgement or to its Previous Position Before Alarm
- Multiple Park and Power-Up Action
- Patterns: Up to 8, On-Screen, User-Defined Configurable Patterns; Includes Pan, Tilt, Zoom, and Preset Functions
- Proportional Pan/Tilt: Continually Decreases Pan/Tilt Speeds in Proportion to Depth of Zoom
- Variable Scan Speed: Scan Speed Can Be Configurable Between 1 to 40°/sec
- Pan Motion Allows 0.1° to 150°/sec Pan Speed
- Configurable Limit Stops for Auto/Random/Frame Scan Modes
- Autosensing Protocol (Coaxitron®, RS-422 Pelco P and Pelco D, Sensormatic®, Vicon®); Accepts Other Control Protocols with Optional Translator Card
- Digital Position and Zoom Control and Feedback Through Pelco D Protocol
- Built-in Menu System for Setup of Configurable Functions
- "Auto Flip" Rotates Dome 180° at Bottom of Tilt Travel
- Configurable Zoom Speeds
- Freeze Frame During Presets

23X Models

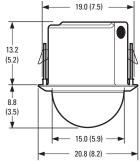
- 64 Presets
- ±0.1° Preset Accuracy
- Multilingual Menus (English, Spanish, Portuguese, Italian, French, German, Russian, Polish, Turkish, and Czech)
- RJ-45 Data Port for Software Update and Setup
- On-Screen Compass, Tilt, and Zoom Display
- · Password Protection
- 400°/sec Pan Preset Speed and 200°/sec Tilt Preset Speed
- Rotating Discreet Liner with Sealed Fixed Bubble
- · Window Blanking: Up to 4, Four-Sided, User-Defined Shapes
- 8 Zones (configurable in size) Can Be Labeled with up to 20 Characters Each or Set to Output Blank Video
- 1 Alarm Input
- 1 Auxiliary (Form C) Relay Output
- · Configurable Locations of Labels and On-Screen Displays
- Patterns: 1 On-Screen, User-Defined Configurable Pattern; Includes Pan, Tilt, Zoom, and Preset Functions
- Proportional Pan/Tilt: Continually Decreases Pan/Tilt Speeds in Proportion to Depth of Zoom
- Variable Scan Speed: Scan Speed Can Be Configurable Between 1 to 40°/sec
- Pan Motion Allows 0.1° to 150°/sec Pan Speed
- Autosensing Protocol (Coaxitron, RS-422 Pelco P and Pelco D, Sensormatic, Vicon); Accepts Other Control Protocols with Optional Translator Card
- Digital Position and Zoom Control and Feedback through Pelco D Protocol
- Built-in Menu System for Setup of Configurable Functions
- "Auto Flip" Rotates Dome 180° at Bottom of Tilt Travel
- Freeze Frame During Presets

BACK BOX FEATURES



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



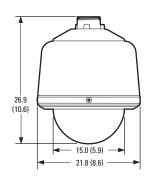


In-Ceiling (Indoor)

- · Built-in Memory Stores Camera/Dome Settings
- · Single Back Box for Suspended or Hard Ceiling Applications
- Requires 13.35 cm (5.25 in.) Space Above Ceiling and 8.25 cm (3.25 in.) Below
- Minimum Ceiling Thickness 1.27 cm (0.50 in.); Maximum 4.45 cm (1.75 in.)
- Quick Disconnect to Dome Drive
- Aluminum Construction
- Suitable for Use in Environmental Air Handling Spaces



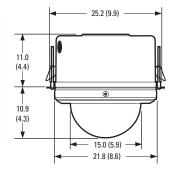
(ENVIRONMENTAL DOME WITH SUN SHROUD SHOWN)



Standard and Environmental Pendant

- Standard and Environmental Models
- 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
- Aluminum Construction
- · Environmental Model Includes Sun Shield, Fan, and Heater





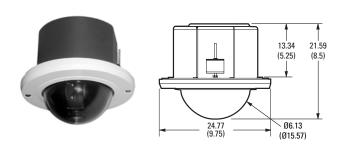
Environmental In-Ceiling

- Built-in Memory Stores Camera/Dome Settings
- Single Back Box for Hard Ceiling Applications
- Requires 11.18 cm (4.40 in.) Space Above Ceiling and 10.92 cm (4.30 in.) Below
- Includes Heater and Fan
- Minimum Ceiling Thickness 1.27 cm (0.50 in.); Maximum 4.45 cm (1.75 in.)
- Quick Disconnect to Dome Drive
- Aluminum Construction

BACK BOX FEATURES



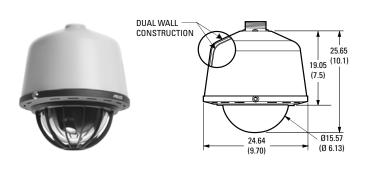
(NOTE: VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.



Heavy-Duty In-Ceiling (Indoor)

Available only with 29X and 36X models

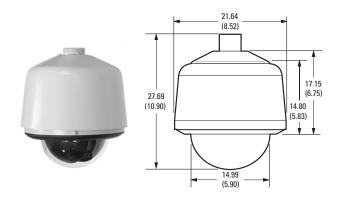
- Built-in Memory Stores Camera/Dome Settings
- Single Back Box for Hard Ceiling Applications
- Requires 13.35 cm (5.25 in.) Space Above Ceiling and 8.25 cm (3.25 in.) Below
- · Quick Disconnect to Dome Drive
- · Reinforced Mounting System
- Heavy-Duty Polycarbonate Dome Bubble
- · Aluminum Trim Ring with Barrel-Type Key Locks
- Optional Protective Cage



Heavy-Duty Pendant

Available only with 29X and 36X models

- · Standard and Environmental Models
- Built-in Memory Stores Camera/Dome Settings
- · Quick Disconnect to Dome Drive
- Dual Wall Construction
- Heavy-Duty Polycarbonate Dome Bubble
- Aluminum Trim Ring with Barrel-Type Key Locks
- Optional Protective Cage
- Environmental Model Includes Sun Shield, Fan, and Heater



Stainless Steel Pendant

Available only with 29X and 36X models

- Standard and Environmental Models
- Built-in Memory Stores Camera/Dome Settings
- · Quick Disconnect to Dome Drive
- All Stainless Steel Construction
- · Includes Sun Shield, Fan, and Heater

GENERAL			Heavy-Duty	
Construction Back Box			Environmental Pendant Maximum	(Assumes no wind chill factor) 60°C (140°F) absolute maximum; 50°C
In-Ceiling	Aluminum		Minimum	(122°F) sustained maximum -51°C (-60°F) absolute minimum; minimal
Pendant	Aluminum		William	icing at sustained minimum of –45°C (–50°F);
Heavy-Duty	Aluminum			prevents icing at sustained minimum of
Stainless Steel	316 stainless ste	el; gray, polyurethane		-40°C (-40°F); de-ices 2.5 mm (0.1 inch)
D D:	powder coated fi			within 3 hours after power-up
Dome Drive	Aluminum, therm	io piastic	Stainless Steel	(Assumes no wind chill factor)
Lower Dome	Aondio		Maximum	60°C (140°F) absolute maximum; 50°C
In-Ceiling Pendant	Acrylic Acrylic			(122°F) sustained maximum
Heavy-Duty	Polycarbonate, 0	N9-inch thick	Minimum	-51°C (-60°F) absolute minimum; minimal
Stainless Steel	Acrylic	.oo man anak		icing at sustained minimum of -45°C (-50°F);
Light Attenuation	,			prevents icing at sustained minimum of
Smoked	f/0.5 light loss			-40°C (-40°F); de-ices 2.5 mm (0.1 inch)
Clear	Zero light loss			within 3 hours after power-up
Chrome	f/2.0 light loss		Effective Projected Area (EPA)	132.257 sq cm (20.5 sq in.) without mount;
Gold	f/2.0 light loss			303.225 sq cm (47 sq in.) with IWM Series
Cable Entry (back box)	0.75 : 1 . 1 :	e con		mount
In-Ceiling Pendant	0.75-inch conduit		BATOLIANIOAL	
	Unit	NPT pendant mount Shipping	MECHANICAL	
Weight (approximate) In-Ceiling	2.4 kg (5.2 lb)	3.6 kg (8 lb)	(Dome Drive Only)	
Environmental In-Ceiling	2.8 kg (6.2 lb)	4.5 kg (10 lb)	Pan Movement	360° continuous pan rotation
Standard Pendant	3.0 kg (6.5 lb)	5.0 kg (11 lb)	Vertical Tilt	Unobstructed +2° to -92°
Environmental Pendant	3.5 kg (7.6 lb)	5.4 kg (12 lb)	Manual Pan/Tilt Speeds	
Heavy-Duty In-Ceiling*	3.3 kg (7.3 lb)	5.4 kg (12 lb)	Pan	0.1° to 80°/sec manual operation,
Heavy-Duty Pendant*	4.5 kg (9.8 lb)	7.3 kg (16 lb)	1 411	150°/sec Turbo
Heavy-Duty Environmental			Tilt	0.1° to 40°/sec manual operation
Pendant*	4.5 kg (9.8 lb)	7.3 kg (16 lb)	Preset Speeds	0.1 to 40 /300 mandar operation
Stainless Steel	4.6 kg (10.1 lb)	(7.3 kg (16 lb)	Pan	400°/sec
Environment In-Ceiling	Indoor			
Environmental In-Ceiling	Outdoor		Tilt	200°/sec For variable-speed operation, an appropriate
Pendant, Standard and	Outuboi			controller is required; (with nonvariable speed
Environmental	Indoor/outdoor			control, Spectra IV IP pan/tilt speed is
Heavy-Duty In-Ceiling	Indoor			20°/sec)
Heavy-Duty Pendant,				
Standard & Environmental	Indoor/outdoor		AUDIO	
Stainless Steel	Indoor/outdoor		Streaming	Bidirectional: full or half duplex
Operating Temperature In-Ceiling	0° to 50°C (32° t	2 122°E\	Input/Output	Terminal block, analog for microphone and
Standard Pendant	(Assumes no wir		input/Output	speaker; 600-ohm differential; 1 Vp-p
Maximum		olute maximum; 35°C (95°F)		maximum signal level
	sustained maxim		Compression	G.711 PCM 8 bit, 8 kHz mono at 64 kbit/sec
Minimum	-4°C (25°F) susta	ained minimum	Comp. 600.	
Environmental In-Ceiling			ELECTRICAL	
and Environmental Pendant				D.L. 4.F
Maximum	(122°F) sustained	olute maximum; 50°C	Ports	RJ-45 connector for 100Base-TX Auto MDI/MDI-X
Minimum		osolute minimum; prevents		Autonegotiate/Manual setting
William		d minimum of -45°C (-50°F);	Cabling Type	Cat5 or better for 100Base-TX
		0.1 inch) within 3 hours after	Input Voltage	18 to 32 VAC; 24 VAC nominal
	power-up		iliput voltaye	22 to 27 VDC; 24 VDC nominal
Heavy-Duty In-Ceiling	0° to 50°C (32° t		Input Power	22 to 21 VD0, 24 VD0 Hollina
Heavy-Duty Pendant		o 122°F) absolute maximum;	24 VAC	23 VA nominal (without heater);
	0° to 50°C (32° to	o 122°F) sustained maximum	Z4 VAC	73 VA nominal (with heater)
			24 VDC	0.7 A nominal (without heater);
			24 VDG	3 A nominal (with heater)
			Fuse	1.25 A
			Auxiliary Outputs	2
			, willian , Gutputo	-

Alarm Inputs

^{*}Add 0.90 kg (2 lb) to the total weight if the system includes a lower dome cage.

RELATED PRODUCTS

CERTIFICATIONS/RATINGS/PATENTS

- CE, Class B
- FCC, Class B
- 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, IP66 when installed properly (BB4E-F-E, BB4E-PB, BB4E-PG, BB4E-PG-E, BB4EHD-PG, BB4EHD-PG-E, and BB4E-PSG-E)
- Meets NEMA Type 1, IP40 (BB4E-F and BB4EHD-F)
- ONVIF 1.02

OPTIONAL ACCESSORIES

HD-KEYS 1 set of keys for heavy-duty lower dome **IPS-CABLE** Remote monitor cable and software kit

consisting of the Spectra IV remote monitor interface cable and necessary software for use with a PC; refer to 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/configuration when used with the

IPS-CABLE

RECOMMENDED MOUNTS

In-Ceiling Domes

SD5-P 2' x 2' drop ceiling panel, aluminum

construction; replaces 2'px 2' ceiling tile

SCA1 Support rails for BB4N-F; for use in ceiling tile

applications

Pendant Domes

BB5-PCA-BK Pendant conduit adapter, black Pendant conduit adapter, gray BB5-PCA-GY

Wall mount, with or without integral 24bVAC, **IWM Series**

100 VA transformer; black or gray finish; can be adapted for corner, parapet or pole

application

Ceiling mount, black MRCA PP4348 Parapet roof mount PP350/PP351 Parapet wall/roof mount

Compact wall mount, black or gray finish; can SWM Series

be adapted for corner or pole applications

Stainless steel wall mount with feedthrough IDM4012SS

capabilities

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.

SYSTEM AND COMPONENT MODELS

SYSTEM MODEL NUMBERS

Tyne	Back Box Color	Lower Dome	Cage	36X Day/Night		29X Day/Night		23X Day/Night	
				NTSC	PAL	NTSC	PAL	NTSC	PAL
In-Ceiling, Indoor Black		Smoked		SD4E36-F0	SD4E36-F0-X	SD4E29-F0	SD4E29-F0-X	SD4E23-F0	SD4E23-F0-X
	Disale	Clear		SD4E36-F1	SD4E36-F1-X	SD4E29-F1	SD4E29-F1-X	SD4E23-F1	SD4E23-F1-X
	Black	Chrome		SD4E36-F2	SD4E36-F2-X	SD4E29-F2	SD4E29-F2-X	SD4E23-F2	SD4E23-F2-X
		Gold		SD4E36-F3	SD4E36-F3-X	SD4E29-F3	SD4E29-F3-X	SD4E23-F3	SD4E23-F3-X
		Smoked		SD4E36-F-E0	SD4E36-F-E0-X	SD4E29-F-E0	SD4E29-F-E0-X	SD4E23-F-E0	SD4E23-F-E0-X
In-Ceiling,	Dlook	Clear		SD4E36-F-E1	SD4E36-F-E1-X	SD4E29-F-E1	SD4E29-F-E1-X	SD4E23-F-E1	SD4E23-F-E1-X
Environmental*	Black	Chrome		SD4E36-F-E2	SD4E36-F-E2-X	SD4E29-F-E2	SD4E29-F-E2-X	SD4E23-F-E2	SD4E23-F-E2-X
		Gold		SD4E36-F-E3	SD4E36-F-E3-X	SD4E29-F-E3	SD4E29-F-E3-X	SD4E23-F-E3	SD4E23-F-E3-X
		Smoked		SD4E36-PB-0	SD4E36-PB-0-X	SD4E29-PB-0	SD4E29-PB-0-X	SD4E23-PB-0	SD4E23-PB-0-X
	Disale	Clear		SD4E36-PB-1	SD4E36-PB-1-X	SD4E29-PB-1	SD4E29-PB-1-X	SD4E23-PB-1	SD4E23-PB-1-X
	Black	Chrome		SD4E36-PB-2	SD4E36-PB-2-X	SD4E29-PB-2	SD4E29-PB-2-X	SD4E23-PB-2	SD4E23-PB-2-X
Pendant,		Gold		SD4E36-PB-3	SD4E36-PB-3-X	SD4E29-PB-3	SD4E29-PB-3-X	SD4E23-PB-3	SD4E23-PB-3-X
Standard		Smoked		SD4E36-PG-0	SD4E36-PG-0-X	SD4E29-PG-0	SD4E29-PG-0-X	SD4E23-PG-0	SD4E23-PG-0-X
	Limbs Cum.	Clear		SD4E36-PG-1	SD4E36-PG-1-X	SD4E29-PG-1	SD4E29-PG-1-X	SD4E23-PG-1	SD4E23-PG-1-X
	Light Gray	Chrome		SD4E36-PG-2	SD4E36-PG-2-X	SD4E29-PG-2	SD4E29-PG-2-X	SD4E23-PG-2	SD4E23-PG-2-X
		Gold		SD4E36-PG-3	SD4E36-PG-3-X	SD4E29-PG-3	SD4E29-PG-3-X	SD4E23-PG-3	SD4E23-PG-3-X
Pendant,	Limbs Com.	Smoked		SD4E36-PG-E0	SD4E36-PG-E0-X	SD4E29-PG-E0	SD4E29-PG-E0-X	SD4E23-PG-E0	SD4E23-PG-E0-X
Environmental*	Light Gray	Clear		SD4E36-PG-E1	SD4E36-PG-E1-X	SD4E29-PG-E1	SD4E29-PG-E1-X	SD4E23-PG-E1	SD4E23-PG-E1-X
		Smoked	No	SD4E36-HF0	SD4E36-HF0-X	SD4E29-HF0	SD4E29-HF0-X		
Heavy-Duty In-Ceiling,			Yes	SD4E36-HCF0	SD4E36-HCF0-X	SD4E29-HCF0	SD4E29-HCF0-X		
In-centry, Indoor		Clear	No	SD4E36-HF1	SD4E36-HF1-X	SD4E29-HF1	SD4E29-HF1-X		
			Yes	SD4E36-HCF1	SD4E36-HCF1-X	SD4E29-HCF1	SD4E29-HCF1-X		
	Light Gray	Smoked	No	SD4E36-HP0	SD4E36-HP0-X	SD4E29-HP0	SD4E29-HP0-X		
Heavy-Duty			Yes	SD4E36-HCP0	SD4E36-HCP0-X	SD4E29-HCP0	SD4E29-HCP0-X		
Pendant, Indoor		Clear	No	SD4E36-HP1	SD4E36-HP1-X	SD4E29-HP1	SD4E29-HP1-X		
			Yes	SD4E36-HCP1	SD4E36-HCP1-X	SD4E29-HCP1	SD4E29-HCP1-X		
Heavy-Duty Pendant, Environmental*		Smoked	No	SD4E36-HPE0	SD4E36-HPE0-X	SD4E29-HPE0	SD4E29-HPE0-X		
			Yes	SD4E36-HCPE0	SD4E36-HCPE0-X	SD4E29-HCPE0	SD4E29-HCPE0-X		
		Claar	No	SD4E36-HPE1	SD4E36-HPE1-X	SD4E29-HPE1	SD4E29-HPE1-X		
		Clear	Yes	SD4E36-HCPE1	SD4E36-HCPE1-X	SD4E29-HCPE1	SD4E29-HCPE1-X		
Stainless Steel	Stainless	Smoked		SD4E36-PSGE0	SD4E36-PSGE0-X	SD4E29-PSGE0	SD4E29-PSGE0-X		
Pendant, Environmental*	Steel	Clear		SD4E36-PSGE1	SD4E36-PSGE1-X	SD4E29-PSGE1	SD4E29-PSGE1-X		

^{*}Environmental dome systems include a heater, fan, and sun shield.

SYSTEM AND COMPONENT MODELS

COMPONENT MODEL NUMBERS

Back Box			Dome Drive	Lower Dome [†]		
BB4E-F	In-ceiling, black, with back box memory	DD423	Day/Night (NTSC) camera (23X)	LDHQF-0	Smoked, in-ceiling	
BB4E-F-E	In-ceiling, black, environmental, with back box memory	DD423-X	Day/Night (PAL) camera (23X)	LDHQF-1	Clear, in-ceiling	
BB4E-PB	Pendant mount, black, standard, with back box memory	DD429	Day/Night (NTSC) camera (29X)	LD5F-2	Chrome, in-ceiling	
BB4E-PG	Pendant mount, gray, standard, with back box memory	DD429-X	Day/Night (PAL) camera (29X)	LD5F-3	Gold, in-ceiling	
BB4E-PG-E*	Pendant mount, gray, environmental, with back box memory	DD436	Day/Night (NTSC) camera (36X)	LDHQPB-0	Smoked, pendant, black	
BB4EHD-F	Heavy-duty, in-ceiling, gray, with back	DD436-X	D/Ni-sh+/DAL) (200V)	LDHQPB-1	Clear, pendant, black	
ОО4ЕП∪-Г	box memory	DD430-Λ	Day/Night (PAL) camera (36X)	LD53PB-2	Chrome, pendant, black [‡]	
BB4EHD-PG	Heavy-duty, pendant, gray, with back box memory			LD53PB-3	Gold, pendant, black [‡]	
BB4EHD-PG-E*	Heavy-duty, environmental pendant, gray, with back box memory			LD53HDF-1	Clear, in-ceiling, heavy-duty	
BB4E-PSG-E*	Stainless steel, environmental pendant, gray 316 SS, with back box memory			LD53HDCF-1	Clear, in-ceiling, heavy-duty with cage	
				LD53HDPB-1	Clear, pendant, heavy-duty	
				LD53HDCPB-1	Clear, pendant, heavy-duty, with cage	
				LD53PSB-0	Smoked, pendant, black trim ring, 316 SS	
				LD53PSB-1	Clear, pendant, black trim ring, 316 SS	
Note: For enviro	nmental applications you must order an e	nvironmental bad	ck box.			

^{*}Environmental dome systems include a heater, fan, and sun shield.

[†]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.