

## **SPECTRA III™ SE SERIES DISCREET DOME SYSTEM, NTSC/EIA**

### **TECHNICAL SPECIFICATIONS**

### **SECURITY SYSTEM**

#### **DIVISION – 28 ELECTRONIC SAFETY AND SECURITY**

#### **LEVEL 1\_\_\_28 20 00 ELECTRONIC SURVEILLANCE**

#### **LEVEL 2\_\_\_28 23 00 VIDEO SURVEILLANCE**

#### **LEVEL 3\_\_\_28 23 29 VIDEO SURVEILLANCE REMOTE DEVICES AND SENSORS**

### **PART 2 - PRODUCTS**

#### **2.01 GENERAL**

- A. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in —actual use.
- C. All systems and components shall be provided with the availability of a toll-free (U.S. and Canada), 24-hour technical assistance program (TAP) from the manufacturer.- The TAP shall allow for immediate technical assistance for either the dealer/installer or the end user at no charge for as long as the product is installed.
- D. All systems and components shall be provided with a one-day turnaround repair express and 24-hour parts replacement. The repair and parts express shall be guaranteed by the manufacturer on warranty and nonwarranty items.

#### **2.02 INDOOR/OUTDOOR CCTV CAMERA DOME SYSTEM**

- A. The indoor/outdoor CCTV camera dome system shall be a discreet, miniature camera dome system consisting of a dome drive with a variable speed/high speed pan and tilt drive unit with continuous 360° rotation, 1/4-inch high resolution color (or monochrome or color/black-white) CCD camera, motorized zoom lens with optical and digital zoom and autofocus; and an enclosure consisting of a back box, lower dome, and a quick-install mounting.
- B. The indoor/outdoor CCTV camera dome system shall meet or exceed the following design and performance specifications.

#### **2.03 DOME DRIVE**

- A. The variable speed/high speed pan and tilt drive unit shall meet or exceed the following design and performance specifications:
  - 1. Pan Speed Variable between 360° per second continuous pan to 0.1° per second
  - 2. Vertical Tilt Unobstructed tilt of +2° to -92°
  - 3. Manual Control Speed Pan speed of 0.1° to 80° per second, and pan at 150° per second in turbo mode. Tilt operation shall range from 0.1° to 40° per second
  - 4. Automatic Preset Speed Pan speed of 360° and a tilt speed of 200° per second

5. Preset	One hundred fifty preset positions with a 20-character label available for each position; programmable camera settings, including selectable autofocus modes, iris level, LowLight™ limit, and backlight compensation, for each preset; command to copy camera settings from one preset to another; preset programming through control keyboard or through dome system on-screen menu
6. Preset Accuracy	+/- 0.1°
7. Proportional Pan/Tilt Speed	Speed decreases in proportion to the increasing depth of zoom
8. Automatic Power-Up	User-selectable to the mode of operation the dome will assume when power is cycled, including automatically returning to position or function occurring before power outage
9. Zones	Eight zones with up to 20-character labeling for each, with ability to blank the video in the zone
10. Motor Drive	Cogged belt with 0.9° stepper motor
11. Motor Operating Mode	Microstep to 0.015° steps
12. Motor	Continuous duty, variable speed, operating at 18 to 30 VAC, 24 VAC nominal
13. Limit Stops	Programmable for manual panning, auto/random scanning, and frame scanning
14. Inner Liner	Rotating black ABS liner inside sealed lower dome
15. Alarm Inputs	Seven N.O./N.C. dry contacts
16. Alarm Outputs	One auxiliary Form C relay output and one open collector auxiliary output
17. Alarm Output Programming	Auxiliary outputs can be alternately programmed to operate on alarm
18. Alarm Action	Individually programmed for three priority levels, initiating a stored pattern or going to a preassigned preset position
19. Resume after Alarm	After completion of alarm, dome returns to previous programmed state or its previous position
20. Window Blanking	Eight four-sided, user-defined shapes, with each side being of different lengths; window blanking setting to turn off at user-defined zoom ratio; window blanking set to opaque gray or translucent smear; blank all video above user-defined tilt angle; blank all video below user-defined tilt angle
21. Patterns	Four user-defined programmable patterns including pan, tilt, zoom, and preset functions; pattern programming through control keyboard or through dome system on-screen menu
22. Pattern Length	Four patterns of user-defined length, based on dome memory

23. Autosensing	Automatically sense and respond to protocol utilized for controlling unit whether Coaxitron® or RS-422 P or D protocols; accept competitors' control protocols with the use of optional translator cards
24. Menu System	Built-in for setup of programmable functions; multilingual, including English, French, Italian, Spanish, Portuguese, and German, and alternative languages in Russian, Turkish, Polish, and Czechoslovakian
25. Auto Flip	Rotates dome 180° at bottom of tilt travel
26. Password Protection	Programmable settings with optional password protection
27. Clear	Clear individual, grouped, or all programmed settings
28. Diagnostics	On-screen diagnostic system information
29. Freeze Frame	Freeze current scene of video during preset movement
30. Display Setup	User-definable locations of all labels and displays; user-selectable time duration of each display
31. Azimuth/Elevation/Zoom	On-screen display of pan and tilt locations and zoom ratio
32. Compass Display	On-screen display of compass heading; user- definable compass setup
33. Video Output Level	User-selectable: normal, or high to compensate for long video wire runs
34. Dome Drive Compatibility	All dome drives are compatible with all back box configurations
35. RJ-45 Jack	Plug-in jack on dome drive for control and setup of unit and for uploading new operating code and language file updates. Compatible with personal computers and PDAs such as Palm and iPAQ
36. Remote Data Port Compatibility	Ability to control and setup unit and to upload new operating code and language file updates through optional remote data port that is located in area with easy access. Compatible with personal computers and PDAs such as Palm and iPAQ
37. UTP Compatibility	Ability to plug into back box an optional third-party board that converts video output to passive, unshielded twisted pair transmission
38. Fiber Optic Compatibility	Ability to plug into back box an FS85011 board that converts video output and control input to fiber optic transmission
39. Third-Party Control Systems	Ability to plug in optional board that converts control signals from selected third-party controllers
40. Power Consumption	Maximum 70 VA
41. Text Overlay	Allows for a 20-character camera title

- B. The high resolution CCD camera shall meet or exceed the following design and performance specifications:

#### **Color/Black-White Optic System**

- |                             |   |
|-----------------------------|---|
| 1. Image Sensor             | 1/4-inch  |
| 2. Scanning System          | 2:1 interlaced output   |
| 3. Effective Pixels         | NTSC – 724 X 494  |
| 4. Horizontal Resolution    | NTSC – >470 TVL   |
| 5. Lens                     | F1.6 (f=3.6-82.8 mm optical, 23X optical zoom, 10X electronic zoom)   |
| 6. Programmable Zoom Speeds | 2.9, 4.2, or 5.8 seconds  |
| 7. Horizontal Angle of View | 54° at 3.6 mm wide zoom – 2.5° at 82.8 mm telephoto zoom  |
| 8. Focus                    | Automatic with manual override  |
| 9. Sensitivity at 35 IRE    | NTSC, color: 0.08 lux at 1/2 sec shutter speed<br>B-W: 0.013 lux at 1/2 sec shutter speed<br>B-W: 0.3 lux at 1/60 sec shutter speed |
| 10. Synchronization System  | Internal/AC line lock phase adjustable via remote control, V-sync   |
| 11. White Balance           | Automatic with manual override  |
| 12. Shutter Speed           | NTSC – 1/2-1/30,000   |
| 13. Iris Control            | Automatic with manual override  |
| 14. Gain Control            | Automatic/ off  |
| 15. Video Output            | 1 volt peak to peak, 75 ohms  |
| 16. Video Signal-to-Noise   | >50 dB  |
| 17. Type of Lighting        | Menu selection of indoor or outdoor lighting for optimum camera performance   |
| 18. Wide Dynamic Range      | 80X   |
| 19. Motion Detection        | User-definable motion detection settings for each preset scene; can activate auxiliary outputs; three sensitivity levels per zone   |

#### **Color Optic System**

- |                             |   |
|-----------------------------|---|
| 1. Image Sensor             | 1/4-inch Ex-View CCD  |
| 2. Scanning System          | 2:1 interlaced output   |
| 3. Effective Pixels         | NTSC – 768 X 494  |
| 4. Horizontal Resolution    | NTSC – >470 TVL   |
| 5. Lens                     | F1.6 (f=4.0-88.0 mm optical, 22X optical zoom, 12X electronic zoom) |
| 6. Programmable Zoom Speeds | 2.4, 3.9, or 6.3 seconds  |
| 7. Horizontal Angle of View | 47° at 4.0 mm wide zoom – 2.2° at 88.0 mm telephoto zoom            |
| 8. Focus                    | Automatic with manual override                                      |
| 9. Sensitivity at 35 IRE    | NTSC, 0.02 lux at 1/2-second shutter speed                          |
| 10. Synchronization System  | Internal/AC line lock phase adjustable via remote control, V-sync   |
| 11. White Balance           | Automatic with manual override                                      |
| 12. Shutter Speed           | NTSC – 1/2-1/30,000   |
| 13. Iris Control            | Automatic with manual override                                      |
| 14. Gain Control            | Automatic/off   |

- |                           |   |
|---------------------------|---|
| 15. Video Output          | 1 volt peak to peak, 75 ohms  |
| 16. Video Signal-to-Noise | >50 dB  |
| 17. Type of Lighting      | Menu selection of indoor or outdoor lighting for optimum camera performance |

### **Monochrome Optic System**

- |                             |   |
|-----------------------------|---|
| 1. Image Sensor             | 1/4-inch Ex-View CCD  |
| 2. Scanning System          | 2:1 interlaced output   |
| 3. Effective Pixels         | EIA -- 768 x 494  |
| 4. Horizontal Resolution    | EIA -- >500 TVL   |
| 5. Lens                     | F1.6 (f=4.0-88.0 mm optical, 22X optical zoom, 12X electronic zoom) |
| 6. Programmable Zoom Speeds | 2.4, 3.9, or 6.3 seconds  |
| 7. Horizontal Angle of View | 47° at 4.0 mm wide zoom – 2.2° at 88.0 mm telephoto zoom            |
| 8. Focus                    | Automatic with manual override                                      |
| 9. Sensitivity at 35 IRE    | EIA, 0.005 lux at 1/2-second shutter speed                          |
| 10. Synchronization System  | Internal/AC line lock phase adjustable via remote control, V-sync   |
| 11. Shutter Speed           | EIA – 1/2-1/30,000  |
| 12. Iris Control            | Automatic with manual override                                      |
| 13. Gain Control            | Automatic/off   |
| 14. Video Output            | 1 volt peak to peak, 75 ohms  |
| 15. Video Signal-to-Noise:  | >48 dB  |

## **2.04 BACK BOX AND LOWER DOME**

The back box and lower dome shall meet or exceed the following design and performance specifications:

### **A. Pendant Environmental**

- |                             |   |
|-----------------------------|---|
| 1. Connection to Dome Drive | Quick, positive mechanical and electrical disconnect without the use of any tools   |
| 2. Trap Door                | Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics |
| 3. Terminal Strips          | Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes   |
| 4. Auxiliary Connections    | One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA  |
| 5. Alarm Inputs             | Seven alarm inputs  |
| 6. Installation             | Quick-mount wall, corner, pole, parapet, or ceiling adapter   |

7. Cable Entry	Through a 1.5-inch NPT fitting
8. Environmental Features	Factory-installed heaters, blowers, and sun shroud
9. Operating Temperatures	Maximum temperature range of -60° to 140°F (-51.1° to 60°C) for two hours, and a continuous operating range of -50° to 122°F (-51.1° to 50°C) continuous operation
10. Memory	Built-in memory storage of camera and location- specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive
11. Color	Gray, baked-on enamel powder coat
12. Construction	Aluminum
13. Lower Dome Material	Acrylic, optically clear, with no distortion in any portion of the dome up to +2° above the horizontal
14. Dome Color	Clear and smoked versions
15. Trim Ring Connection	Two captivated screws

#### **B. In-Ceiling Environmental**

1. Connection to Dome Drive	Quick, positive mechanical and electrical disconnect without the use of any tools
2. Trap Door	Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics
3. Terminal Strips	Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes
4. Auxiliary Connections	One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA
5. Alarm Inputs	Seven alarm inputs
6. Installation	Quick-mount spring clips
7. Cable Entry	Through a 0.75-inch conduit hole
8. Environmental Features	Factory-installed heaters and blowers
9. Operating Temperatures	Maximum temperature range of -60° to 140°F (-51.1° to 60°C) for two hours, and a continuous operating range of -50° to 122°F (-51.1° to 50°C) continuous operation
10. Memory	Built-in memory storage of camera and location- specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive
11. Color	Black, baked-on enamel powder coat

12. Construction	Aluminum
13. Lower Dome Material	Acrylic, optically clear, with no distortion in any portion of the dome up to +2° above the horizontal
14. Dome Color	Clear and smoked versions
15. Trim Ring Connection	Two captivated screws

### C. In-Ceiling Interior

1. Connection to Dome Drive	Quick, positive mechanical and electrical disconnect without the use of any tools
2. Trap Door	Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics
3. Terminal Strips	Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes
4. Auxiliary Connections	One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA
5. Alarm Inputs	Seven alarm inputs
6. Installation	Quick-mount spring clips
7. Cable Entry	Through a 0.75-inch conduit hole
8. Operating Temperatures	Maximum temperature range of 32° to 122°F (0° to 50°C)
9. Memory	Built-in memory storage of camera and location-specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive
10. Color	Black back box, baked-on enamel powder coat; white trim ring
11. Construction	Aluminum
12. Lower Dome Material	Acrylic, optically clear, with no distortion in any portion of the dome up to +2° above the horizontal
13. Dome Color	Clear, smoked, chrome, and gold versions
14. Trim Ring Connection	Snaps in place
15. Safety Cable	Plastic tether

### D. Pendant Standard

1. Connection to Dome Drive	Quick, positive mechanical and electrical disconnect without the use of any tools
2. Trap Door	Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics

3. Terminal Strips	Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes
4. Auxiliary Connections	One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA
5. Alarm Inputs	Seven alarm inputs
6. Installation	Quick-mount wall, corner, pole, parapet, or ceiling adapter
7. Cable Entry	Through a 1.5-inch NPT fitting
8. Operating Temperatures	Maximum temperature range of 25° to 113°F (-4° to 45°C) for two hours, and a continuous operating range of 25° to 95°F (-4° to 35°C) continuous operation
9. Memory	Built-in memory storage of camera and location- specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive
10. Colors	Gray or black, baked-on enamel powder coat
11. Construction	Aluminum
12. Lower Dome Material	Acrylic, optically clear, with no distortion in any portion of the dome up to +2° above the horizontal
13. Dome Color	Clear, smoked, chrome, and gold versions
14. Trim Ring Connection	Two captivated screws

#### **E. Surface Mount Interior**

1. Connection to Dome Drive	Quick, positive mechanical and electrical disconnect without the use of any tools
2. Trap Door	Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics
3. Terminal Strips	Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes
4. Auxiliary Connections	One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA
5. Alarm Inputs	Seven alarm inputs
6. Installation	Surface mount
7. Cable Entry	Through a 0.75-inch conduit hole
8. Operating Temperatures	Maximum temperature range of 32° to 122°F (0° to 50°C)
9. Memory	Built-in memory storage of camera and location- specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive



10. Colors	Black or white finish
11. Construction	Plastic
12. Lower Dome Material	Acrylic, optically clear, with no distortion in any portion of the dome up to +2° above the horizontal
13. Dome Color	Clear, smoked, chrome, and gold versions
14. Trim Ring Connection	Snaps in place
15. Safety Cable	Plastic tether

#### **F. Heavy Duty In-Ceiling Interior**

1. Connection to Dome Drive	Quick, positive mechanical and electrical disconnect without the use of any tools
2. Trap Door	Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics
3. Terminal Strips	Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes
4. Auxiliary Connections	One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA
5. Alarm Inputs	Seven alarm inputs
6. Installation	Quick-mount spring clips
7. Cable Entry	Through a .75-inch conduit hole
8. Operating Temperatures	Maximum temperature range of 32° to 122°F (0° to 50°C)
9. Memory	Built-in memory storage of camera and location-specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive
10. Color	Black, baked-on enamel powder coat
11. Construction	Aluminum, with 0.090-inch thick, clear polycarbonate lower dome and aluminum trim ring
12. Trim Ring Connection	Barrel type key locks
13. Lower Dome Protection	Available with optional stainless steel cage around lower dome. Bars of cage not to interfere with picture at medium to high zoom rates

#### **G. Heavy Duty Pendant Environmental**

1. Connection to Dome Drive	Quick, positive mechanical and electrical disconnect without the use of any tools
2. Trap Door	Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics

3. Terminal Strips	Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes
4. Auxiliary Connections	One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA
5. Alarm Inputs	Seven alarm inputs
6. Installation	Quick-mount wall, corner, pole, parapet, or ceiling adapter
7. Cable Entry	Through a 1.5-inch NPT fitting
8. Environmental Features	Factory-installed heaters, blowers, and sun shroud
9. Operating Temperatures	Maximum temperature range of -60° to 140°F (-51.1° to 60°C) for two hours, and a continuous operating range of -50° to 122°F (-51.1° to 50°C) continuous operation
10. Memory	Built-in memory storage of camera and location- specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive
11. Color	Gray, baked-on enamel powder coat
12. Construction	Tough, dual wall aluminum enclosure with a 0.090-inch thick, clear polycarbonate lower dome and aluminum trim ring
13. Trim Ring Connection	Barrel type key locks
14. Lower Dome Protection	Available with optional stainless steel cage around lower dome. Bars of cage not to interfere with picture at medium to high zoom rates

#### **H. Heavy Duty Pendant Standard**

1. Connection to Dome Drive	Quick, positive mechanical and electrical disconnect without the use of any tools
2. Trap Door	Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics
3. Terminal Strips	Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes
4. Auxiliary Connections	One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA
5. Alarm Inputs	Seven alarm inputs
6. Installation	Quick-mount wall, corner, pole, parapet, or ceiling adapter
7. Cable Entry	Through a 1.5-inch NPT fitting

8. Operating Temperatures	Maximum temperature range of 25° to 113°F (-4° to 45°C) for two hours, and a continuous operating range of 25° to 95°F (-4° to 35°C) continuous operation
9. Memory	Built-in memory storage of camera and location- specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive
10. Colors	Gray baked-on enamel powder coat
11. Construction	Tough, dual wall aluminum enclosure with a 0.090-inch thick, clear polycarbonate lower dome and aluminum trim ring
12. Trim Ring Connection	Barrel type key locks
13. Lower Dome Protection	Available with optional stainless steel cage around lower dome. Bars of cage not to interfere with picture at medium to high zoom rates

#### **I. Stainless Steel Pendant Environmental**

1. Connection to Dome Drive	Quick, positive mechanical and electrical disconnect without the use of any tools
2. Trap Door	Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics
3. Terminal Strips	Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes
4. Auxiliary Connections	One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA
5. Alarm Inputs	Seven alarm inputs
6. Installation	Quick-mount wall, corner, pole, parapet, or ceiling adapter
7. Cable Entry	Through a 1.5-inch NPT fitting
8. Environmental Features	Factory-installed heaters, blowers, and sun shroud
9. Operating Temperatures	Maximum temperature range of -60° to 140°F (-51.1° to 60°C) for two hours, and a continuous operating range of -50° to 122°F (-51.1° to 50°C) continuous operation
10. Memory	Built-in memory storage of camera and location- specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive
11. Color	Gray, baked-on enamel powder coat
12. Construction	All 316 stainless steel enclosure, sun shroud, trim ring, and mounting plate

- |                          |  |
|--------------------------|--|
| 13. Lower Dome Material  | Acrylic, optically clear, with no distortion in any portion of the dome up to +2° above the horizontal |
| 14. Dome Color           | Clear and smoked versions  |
| 15. Trim Ring Connection | Two screws   |

#### J. Pressurized Stainless Steel Pendant Environmental

- |                                   |   |
|-----------------------------------|---|
| 1. Connection to Dome Drive       | Quick, positive mechanical and electrical disconnect without the use of any tools   |
| 2. Trap Door                      | Easy-access trap door that allows complete access to the installation wiring and, when closed, provides complete separation of the wiring from the dome drive mechanics                                     |
| 3. Terminal Strips                | Removable terminal strips with screw-type terminals for use with a wide range of wire gauge sizes   |
| 4. Auxiliary Connections          | One Form-C relay output at <40 V, 2 A maximum, and a second open collector output at 32 VDC maximum at 30 mA  |
| 5. Alarm Inputs                   | Seven alarm inputs  |
| 6. Installation                   | Quick-mount wall, corner, pole, parapet, or ceiling adapter   |
| 7. Cable Entry                    | Through a prewired, pressure-rated multiconductor fitting   |
| 8. Environmental Features         | Factory-installed heaters, blowers, and sun shroud  |
| 9. Operating Temperatures         | Maximum temperature range of -60° to 140°F (-51.1° to 60°C) for two hours, and a continuous operating range of -50° to 122°F (-51.1° to 50°C) continuous operation  |
| 10. Memory                        | Built-in memory storage of camera and location- specific dome settings such as presets and patterns. If new dome drive is installed in back box, all settings to download automatically into new dome drive |
| 11. Color                         | Gray, baked-on enamel powder coat   |
| 12. Construction                  | All 316 stainless steel enclosure, sun shroud, trim ring, and mounting plate  |
| 13. Lower Dome Material           | Polycarbonate, optically clear, with no distortion in any portion of the dome up to +2° above the horizontal  |
| 14. Dome Color                    | Clear and smoked versions   |
| 15. Trim Ring Connection          | Stainless steel V-band  |
| 16. Pressure Ports                | Schrader valve and pressure relief valve  |
| 17. Operating Pressure            | 5 psig typical, 7 psig pressure relief  |
| 18. Internal Sensors              | Pressure, dew point, and temperature  |
| 19. Internal Sensor Reporting     | On-screen display   |
| 20. Sensor Out-of-Range Reporting | On-screen alerts with acknowledgment options and selectable position on the display monitor. User-programmable activation of AUX output   |
| 21. Fiber Optic Feedthrough       | Optional single-mode or multimode fiber optic feedthrough connector   |

**2.05 DOME SYSTEM DIMENSIONS**

A. All Models Diameter of Bubble	Maximum of 5.9 inches
B. Pendant Environmental	Pendant 10.76-inch (27.33 cm) overall length (including dome) by 9.03-inch (22.94 cm) diameter
C. In-Ceiling Environmental	4.47 inches (11.35 cm) above ceiling, 4.21 inches (10.69 cm) below ceiling, 8.52-inch (20.96 cm) diameter; lower dome 4.3 inches (10.9 cm) below ceiling
D. In-Ceiling Interior	5.22 inches (13.26 cm) above ceiling, 3.53 inches (8.97 cm) below ceiling, 8.52-inch (20.96 cm) diameter; lower dome maximum of 2.75 inches (6.7 cm) below ceiling
E. Pendant Standard	Pendant 10.76-inch (27.33 cm) overall length (including dome) by 9.03-inch (22.94 cm) diameter
F. Surface Mount Interior	8.87 inches (22.53 cm) by 7.63-inch (19.38 cm) diameter
G. Heavy Duty In-Ceiling Interior	5.22 inches (13.26 cm) above ceiling, 3.53 inches (8.97 cm) below ceiling, 8.52-inch (20.96 cm) diameter; lower dome maximum of 2.75 inches (6.7 cm) below ceiling
H. Heavy Duty Pendant Environ.	Pendant 10.76-inch (27.33 cm) overall length (including dome) by 9.7-inch (24.7 cm) diameter
I. Heavy Duty Pendant Standard	Pendant 10.76-inch (27.33 cm) overall length (including dome) by 9.7-inch (24.7 cm) diameter
J. Stainless Steel Pendant Environ.	Pendant 10.76-inch (27.33 cm) overall length (including dome) by 9.7-inch (24.7 cm) diameter
K. Stainless Steel Pressurized Environmental Pendant	Pendant 11.63-inch (29.5 cm) overall length (including dome) by 10.5-inch (26.7 cm) diameter

**2.06 DOME SYSTEM WEIGHTS**

A. Pendant Environmental	6.5 lb (2.9 kg)
B. In-Ceiling Environmental	5.1 lb (2.3 kg)
C. In-Ceiling Interior	4.1 lb (1.9 kg)
D. Pendant Standard	5.4 lb (2.4 kg)
E. Surface Mount Interior	3.5 lb (1.6 kg)
F. Heavy Duty In-Ceiling Interior	
With Cage	8.2 lb (3.7 kg)
Without Cage	6.2 lb (2.8 kg)
G. Heavy Duty Pendant Environ.	
With Cage	11.0 lb (5.0 kg)
Without Cage	9.0 lb (4.1 kg)
H. Heavy Duty Pendant Standard	
With Cage	10.7 lb (4.8 kg)
Without Cage	8.7 lb (3.9 kg)
I. Stainless Steel Pendant Environ.	9.0 lb (4.1 kg)
J. Stainless Steel Pressurized Environmental Pendant	11.0 lb (5.0 kg)

**2.07 MANUFACTURER'S WARRANTY**

Repair or replacement of defective parts for a period of two years from the date of shipment, including continuous motion modes

**2.08 CERTIFICATIONS AND RATINGS****A. Certifications**

All Models	UL and cUL, FCC Class B, and CE Class B
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**B. Ratings**

Pendant Environmental	Meets NEMA Type 4X, IP66 standards
In-Ceiling Environmental	
Pendant Standard	
Heavy Duty Pendant Environ.	
Heavy Duty Pendant Standard	Meets NEMA Type 1, IP40 standards
Stainless Steel Pendant Environ.	
In-Ceiling Interior	
Heavy Duty In-Ceiling Interior	
Stainless Steel Pressurized Environmental Pendant	Meets NEMA Type 6P, IP67 standards

## 2.09 MODELS

The discreet CCTV camera dome system shall be the Pelco Spectra III Series:

### A. Color/B-W Dome:

<u>Type</u>	<u>Back Box</u>	<u>Model</u>	<u>Dome</u>
Surface Mount	White	SD53CBW-SMW-0	Smoked
		SD53CBW-SMW-1	Clear
		SD53CBW-SMW-2	Chrome
		SD53CBW-SMW-3	Gold
Surface Mount	Black	SD53CBW-SMB-0	Smoked
		SD53CBW-SMB-1	Clear
		SD53CBW-SMB-2	Chrome
		SD53CBW-SMB-3	Gold
In-Ceiling, Indoor		SD53CBW-F0	Smoked
		SD53CBW-F1	Clear
		SD53CBW-F2	Chrome
		SD53CBW-F3	Gold
In-Ceiling, Environmental	Black	SD53CBW-F-E0	Smoked
		SD53CBW-F-E1	Clear
		SD53CBW-HF1	Clear
		SD53CBW-HCF1	Clear
Heavy Duty In-Ceiling, Indoor (Without Cage)			
Heavy Duty In-Ceiling, Indoor (With Cage)			
Pendant, Standard	Black	SD53CBW-PB-0	Smoked
		SD53CBW-PB-1	Clear
		SD53CBW-PB-2	Chrome
		SD53CBW-PB-3	Gold
Pendant, Standard	Lt. Gray	SD53CBW-PG-0	Smoked
		SD53CBW-PG-1	Clear
		SD53CBW-PG-2	Chrome
		SD53CBW-PG-3	Gold
Heavy Duty Pendant, Standard Without Cage	Lt. Gray	SD53CBW-HP1	Clear
Heavy Duty Pendant, Standard With Cage	Lt. Gray	SD53CBW-HCP1	Clear
Pendant, Environmental	Lt. Gray	SD53CBW-PG-E0	Smoked
		SD53CBW-PG-E1	Clear
Heavy Duty Pendant, Environmental, Without Cage	Lt. Gray	SD53CBW-HPE1	Clear
Heavy Duty Pendant, Environmental, With Cage	Lt. Gray	SD53CBW-HCPE1	Clear

Stainless Steel Pendant, Environmental	Lt. Gray	SD53CBW-PSGE0	Smoked
		SD53CBW-PSGE1	Clear
Stainless Steel Pendant, Pressurized Environmental	Lt. Gray	SD53CBW-PRE0	Smoked
		SD53CBW-PRE1	Clear
Stainless Steel Pendant, Pressurized Environmental With Single-Mode Fiber Optic Feedthrough	Lt. Gray	SD53CBW-PRSE0	Smoked
		SD53CBW-PRSE1	Clear
Stainless Steel Pendant, Pressurized Environmental With Multimode Fiber Optic Feedthrough	Lt. Gray	SD53CBW-PRME0	Smoked
		SD53CBW-PRME1	Clear

**B. Color Dome:**

<u>Type</u>	<u>Back Box</u>	<u>Model</u>	<u>Dome</u>
Surface Mount	White	SD53C22-SMW-0	Smoked
		SD53C22-SMW-1	Clear
		SD53C22-SMW-2	Chrome
		SD53C22-SMW-3	Gold
Surface Mount	Black	SD53C22-SMB-0	Smoked
		SD53C22-SMB-1	Clear
		SD53C22-SMB-2	Chrome
		SD53C22-SMB-3	Gold
In-Ceiling, Indoor		SD53C22-F0	Smoked
		SD53C22-F1	Clear
		SD53C22-F2	Chrome
		SD53C22-F3	Gold
In-Ceiling, Environmental	Black	SD53C22-F-E0	Smoked
		SD53C22-F-E1	Clear
		SD53C22-HF1	Clear
		SD53C22-HCF1	Clear
Heavy Duty In-Ceiling, Indoor (Without Cage)			
Heavy Duty In-Ceiling, Indoor (With Cage)			
Pendant, Standard	Black	SD53C22-PB-0	Smoked
		SD53C22-PB-1	Clear
		SD53C22-PB-2	Chrome
		SD53C22-PB-3	Gold
Pendant, Standard	Lt. Gray	SD53C22-PG-0	Smoked
		SD53C22-PG-1	Clear
		SD53C22-PG-2	Chrome
		SD53C22-PG-3	Gold
Heavy Duty Pendant, Standard Without Cage	Lt. Gray	SD53C22-HP1	Clear
Heavy Duty Pendant, Standard With Cage	Lt. Gray	SD53C22-HCP1	Clear
Pendant, Environmental	Lt. Gray	SD53C22-PG-E0	Smoked
		SD53C22-PG-E1	Clear
Heavy Duty Pendant, Environmental Without Cage	Lt. Gray	SD53C22-HPE1	Clear
Heavy Duty Pendant, Environmental With Cage	Lt. Gray	SD53C22-HCPE1	Clear



Stainless Steel Pendant, Environmental	Lt. Gray	SD53C22-PSGE0 SD53C22-PSGE1	Smoked Clear
Stainless Steel Pendant, Pressurized Environmental	Lt. Gray	SD53C22-PRE0 SD53C22-PRE1	Smoked Clear
Stainless Steel Pendant, Pressurized Environmental With Single-Mode Fiber Optic Feedthrough	Lt. Gray	SD53C22-PRSE0 SD53C22-PRSE1	Smoked Clear
Stainless Steel Pendant, Pressurized Environmental With Multi Mode Fiber Optic Feed Through	Lt. Gray	SD53C22-PRME0 SD53C22-PRME1	Smoked Clear

**C. Monochrome Dome:**

<u>Type</u>	<u>Back Box</u>	<u>Model</u>	<u>Dome</u>
Surface Mount	White	SD53M22-SMW-0 SD53M22-SMW-1 SD53M22-SMW-2 SD53M22-SMW-3	Smoked Clear Chrome Gold
Surface Mount	Black	SD53M22-SMB-0 SD53M22-SMB-1 SD53M22-SMB-2 SD53M22-SMB-3	Smoked Clear Chrome Gold
In-Ceiling, Indoor		SD53M22-F0 SD53M22-F1 SD53M22-F2 SD53M22-F3	Smoked Clear Chrome Gold
In-Ceiling, Environmental	Black	SD53M22-F-E0 SD53M22-F-E1 SD53M22-HF1	Smoked Clear Clear
Heavy Duty In-Ceiling, Indoor (Without Cage) Heavy Duty In-Ceiling, Indoor (With Cage) Pendant, Standard	Black	SD53M22-HCF1	Clear
Pendant, Standard	Lt. Gray	SD53M22-PB-0 SD53M22-PB-1 SD53M22-PB-2 SD53M22-PB-3 SD53M22-PG-0 SD53M22-PG-1 SD53M22-PG-2 SD53M22-PG-3 SD53M22-HP1	Smoked Clear Chrome Gold Smoked Clear Chrome Gold Clear
Heavy Duty Pendant, Standard Without Cage	Lt. Gray		
Heavy Duty Pendant, Standard With Cage	Lt. Gray	SD53M22-HCP1	Clear
Pendant, Environmental	Lt. Gray	SD53M22-PG-E0 SD53M22-PG-E1	Smoked Clear
Heavy Duty Pendant, Environmental Without Cage	Lt. Gray	SD53M22-HPE1	Clear
Heavy Duty Pendant, Environmental With Cage	Lt. Gray	SD53M22-HCPE1	Clear

Stainless Steel Pendant, Environmental	Lt. Gray	SD53M22-PSGE0 SD53M22-PSGE1	Smoked Clear
Stainless Steel Pendant, Pressurized Environmental	Lt. Gray	SD53M22-PRE0 SD53M22-PRE1	Smoked Clear
Stainless Steel Pendant, Pressurized Environmental With Single-Mode Fiber Optic Feedthrough	Lt. Gray	SD53M22-PRSE0 SD53M22-PRSE1	Smoked Clear
Stainless Steel Pendant, Pressurized Environmental With Multimode Fiber Optic Feedthrough	Lt. Gray	SD53M22-PRME0 SD53M22-PRME1	Smoked Clear

or approved equal