

SPECTRA MINI IP SERIES NETWORK DOME SYSTEM, NTSC/PAL

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 SPECTRA MINI IP MINIATURE CAMERA DOME SYSTEM

- A. Spectra® Mini IP shall include a built-in 100Base-TX network interface for live streaming to a standard Web browser.
- B. Spectra Mini IP shall operate in an Endura® environment and accept Endura commands, and it shall operate with Integral Digital Sentry® video management systems. Spectra Mini IP shall feature open architecture connectivity for third-party software recording solutions.
- C. Spectra Mini IP shall incorporate many well-known features from Pelco's full-size Spectra IV dome system into a cost-effective, small, 4.1-inch diameter dome bubble form factor. The easy-to-install dome system shall be mounted to the surface of ceilings or recessed into hard ceilings and suspended tile ceilings. A high resolution camera shall transmit video over an IP network. Pan/tilt operation and camera control shall also be accessible over an IP network. On-screen programming shall allow easy setup of the miniature dome's many features. Spectra Mini IP shall be IEEE 802.3af Power over Ethernet (PoE) compatible, which shall supply power to the dome system through the network. If PoE is not available, the unit shall be prewired for 24 VAC.
- D. Variable speed capabilities of the Spectra Mini IP shall range from a fast motion of 140 degrees per second to a smooth "creep" speed of 0.4 degrees per second. The system shall be capable of continuous 360 degrees rotation and shall have 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.
- E. Spectra Mini IP shall meet or exceed the following design and performance specifications.

2.03 MECHANICAL

- A. Spectra Mini IP shall transmit digital video over an IP network that shall meet or exceed the following design and performance specifications.

| | |
|-------------------------------------|--|
| 1. Digital Compression | MJPEG, MPEG-4 (available only with Microsoft® Internet Explorer®) |
| 2. Video Streams | 3, simultaneous |
| 3. Video Resolutions | <u>NTSC</u> <u>PAL</u> |
| a. 4CIF | 704 x 480 704 x 576 |
| b. 2CIF | 704 x 240 704 x 288 |
| c. CIF | 352 x 240 352 x 288 |
| d. QCIF | 176 x 120 176 x 144 |
| 4. Bit Rate Configurable | |
| a. MPEG-4 | 30 ips, 2 Mbps for primary stream, 1 Mbps for secondary stream; implements EnduraView™ |
| b. MJPEG | 15 ips, 3 Mbps, MJPEG |
| 5. Web User Interface | |
| a. Pelco Device Utility | For viewing HTTP, requires Java Runtime Environment (JRE™) |
| b. Internet Explorer | For viewing and control, requires ActiveX® |
| c. Firefox® | For viewing and control |
| 6. Users | 5 simultaneous users MJPEG and/or MPEG-4 unicast; unlimited number of users using multicast (MPEG-4 only) |
| 7. Minimum Web Browser Requirements | PC (Pentium® 4 microprocessor, 1.6 GHz) with Windows® 98, Windows 2000, Windows XP (or later) or Mac® OS X 10.3.9 (or later) |
| 8. RAM | 512 MB |
| 9. Ethernet Card | 100 Megabits |
| 10. Web Browser | Microsoft Internet Explorer 5.5 (or later); Mozilla® Firefox 1.5 (or later) |
| 11. Screen Resolution | 1024 x 768 pixels or higher, 16- or 32-bit pixel color resolution |
| 12. Firmware Upgrade | Pelco Device Utility or Endura Application |
| 13. Supported Protocols | TCP/IP, UDP/IP (unicast, multicast IGMP), UPnP, DNS, DHCP, RTP, NTP |

- B. Spectra Mini IP's variable speed/high speed pan/tilt drive unit shall meet or exceed the following design and performance specifications.

| | |
|--------------------------|---|
| 1. Pan Movement | 360° continuous pan rotation |
| 2. Vertical Tilt | Unobstructed tilt of +2° to -92° |
| 3. Manual Control Speeds | |
| a. Pan | 0.4° to 80°/sec, 100°/sec turbo |
| b. Tilt | 7° to 40°/sec |
| 4. Presets | 64 |
| 5. Preset Speeds | |
| a. Pan | 140°/sec |
| b. Tilt | 80°/sec |
| | NOTE: For variable speed operation, an appropriate controller is required. |
| 6. Preset Accuracy | +/- 0.5° |

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|--------------------------------|---|
| 7. Proportional Pan/Tilt Speed | Continually decreases pan and tilt speeds in proportion to the depth of zoom |
| 8. Automatic Power-Up | User-selectable to the mode of operation the dome will assume when power is cycled |
| 9. Zones | 4 zones with up to 20-character labeling for each, with ability to blank the video in the zone |
| 10. Motor | Continuous duty, variable speed, operating at 18 to 30 VAC, 24 VAC nominal |
| 11. Limit Stops | Programmable auto, random, and frame scanning |
| 12. Window Blanking | 1 programmable window blanking area |
| 13. Patterns | 1 on-screen, programmable pattern including pan, tilt, zoom, and preset functions |
| 14. Pattern Length | 1 pattern of user-defined length, based on dome memory |
| 15. Alarms | 1 input |
| 16. Auxiliary | 1 relay output |
| 17. Camera Menu System | Built-in for setup of programmable functions; multilingual, including English, French, Italian, Spanish, Portuguese, and German; alternative languages in Russian, Turkish, Polish, and Czech |
| 18. Auto Flip | Rotates dome 180° at bottom of tilt travel |
| 19. Password Protection | Programmable settings with optional password protection |
| 20. Diagnostics | On-screen diagnostic system information |
| 21. Display Setup | User-definable locations of all labels and displays; user-selectable time duration of each display |
| 22. Azimuth/Elevation/Zoom | On-screen display of pan and tilt locations and zoom ratio |
| 23. Cable Entry | RJ-45 connector for PoE and 100Base-TX, auto MDI/MDI-X, autonegotiate; 2-position 24 VAC input connector; 8-position alarm/aux terminal block connector |
| 24. Cable Type | Cat5 or better for 100Base-TX |
| 25. Input Voltage/Amps | 18 to 30 VAC, 24 VAC nominal; 0.75 A, 50/60 Hz nominal |
| 26. Input Power | 18 VA nominal |
| 27. PoE | IEEE 802.3af class 3 |
| 28. Audio | Line-in, 600-ohm differential, 1 Vp-p maximum signal level |
| 29. Installation/Maintenance | Dome drive and top cap are integrated into one comprehensive unit reducing the number of components to make installation and maintenance simple |

- C. Spectra Mini IP shall contain an integrated optics package (IOP) that shall meet or exceed the following design and performance specifications.

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|--------------------------------|--|
| 1. Signal Format | NTSC/PAL |
| 2. Scanning System | 2:1 interlace |
| 3. Image Sensor | 1/4-inch interline CCD |
| 4. Effective Pixels | |
| a. NTSC | 768 (H) X 494 (V) |
| b. PAL | 752 (H) X 582 (V) |
| 5. Minimum Illumination | 3.0 lux |
| 6. White Balance | Automatic with manual override |
| 7. Shutter Speed | Automatic (electronic iris)/manual:1/60~1/30,000 |
| 8. Gain Control | Automatic with manual override |
| 9. Lens | f/1.8 (f=4.2~42 mm optical) |
| | 10X optical zoom, 8X digital zoom |
| 10. Zoom Speed (optical range) | 1.5/2.5/4.3 seconds (menu selectable) |
| 11. Horizontal Angle of View | 46.4° wide zoom, 5.0° telephoto zoom |
| 12. Focus | Automatic with manual override |
| 13. Iris Control | Automatic with manual override |

2.04 ENVIRONMENTAL

- A. Spectra Mini IP's top cap and dome drive shall be integrated into one comprehensive unit that shall meet or exceed the following design and performance specifications.

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|--------------------------|---|
| 1. Top Cap | The top cap shall be manufactured from alodined cast aluminum, and it shall contain heat sink flanges for increased heat dissipation to allow the dome to be passively cooled |
| 2. Dome Drive | ABS plastic |
| 3. Trim Ring and Surface | |
| a. Mount Ring | ABS plastic |
| b. Bubble | Acrylic |
| c. Finish | White or black |
| 4. Light Attenuation | |
| a. Smoked | f/0.5 light loss |
| b. Clear | Zero light loss |
| 5. Environment | Indoor |
| 6. Operating Temperature | 32° to 122°F (0° to 50°C) |
| 7. Unit Weight | 1.88 lb (0.85 kg) |
| 8. Dimensions | 5.13" H x 6.19" W (13.03 cm x 15.72 cm) |

2.05 OPTIONAL ACCESSORIES

- A. The following accessories shall be available for use with the Spectra Mini IP Series dome systems.

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| 1. SPM4-W | The Spectra Mini IP shall be pendant mounted by utilizing the white SPM4-W pendant mount adapter. |
| 2. SPM4-B | The Spectra Mini IP shall be pendant mounted by utilizing the black SPM4-B pendant mount adapter. |
| 3. SWM4-W | The Spectra Mini IP shall be wall mounted by utilizing the white SWM4-W wall mount. |
| 4. SWM4-B | The Spectra Mini IP shall be wall mounted by utilizing the black SWM4-B wall mount. |

2.06 MANUFACTURER'S WARRANTY

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

2.07 CERTIFICATIONS AND RATINGS

- A. CE, Class B
 B. FCC, Class B
 C. UL/cUL Listed
 D. C-Tick

2.08 MODELS

- A. The discreet miniature camera dome system shall be the Pelco Spectra Mini IP Series.

| <u>Model</u> | <u>Type</u> | <u>Color</u> | <u>Bubble</u> |
|--------------|-------------|--------------|---------------|
| 1. SD4N-W0 | NTSC | White | Smoked |
| 2. SD4N-W1 | NTSC | White | Clear |
| 3. SD4N-W0-X | PAL | White | Smoked |
| 4. SD4N-W1-X | PAL | White | Clear |
| 5. SD4N-B0 | NTSC | Black | Smoked |
| 6. SD4N-B1 | NTSC | Black | Clear |
| 7. SD4N-B0-X | PAL | Black | Smoked |
| 8. SD4N-B1-X | PAL | Black | Clear |

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