AV1255PM-S **1.2MP H.264 Day/Night IP MegaDome® 2 Stellar Camera w/ 3-9mm Remote Zoom, Remote Focus, P-Iris, SD Card**

AV1255PMIR-S **1.2MP H.264 Day/Night IP MegaDome® 2 Stellar Camera w/ 3-9mm Remote Zoom, Remote Focus, P-Iris, SD Card, IR LEDs**

This A&E specification is written according to Construction Specifications Institute (CSI) 3-Part Format, based on MasterFormat™ (2009 Edition) and The Project Resource Manual – CSI Manual of Practice. www.csinet.org/masterformat.
Manufacturer is responsible for the accuracy of the technical data included in this specification.

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Division 28 – Electric Safety and Security
Section 28.23.29 – Video Surveillance – Remote Devices and Sensors

Part 1 General

1.1 General Requirements

The camera shall be of manufacturer's official product line, designed for continuous commercial or industrial use.
The camera shall be based on standard parts and components and utilize proven technology using open and published protocols.
All camera installation, configuration, setup, programming and all related work shall be performed by electronic technicians thoroughly trained in the installation and service of the equipment provided and in complete compliance with all local codes and regulations.
All equipment provided shall be backed by a three-year manufacturer warranty.

1.2 Certifications and Standards

a) European Community Directives:
2004/108/EC (EMC Directive);
2006/95/EC (Low Voltage Directive);
2011/65/EU (RoHS Directive)
1907/2006/EC (REACH Directive)
2002/96/EC (WEEE Directive)

b) European EMC Standards to which conformity is declared:
EN 55022:2010 Class A
EN 55024:2010
EN 61000-3-2:2006+A1:2009+A2:2009
EN61000-3-3: 2008
EN60950-1:2006+A11:2009+A1:2010+A12:2011

CE

c) UL Listing
CB Test Report (IEC 60950-1 (ed. 2) and IEC 60950-22 (ed. 1))

d) FCC Standard Compliance:
Title 47, Part 15 (47 CFR 15) Subpart B Class A

e) Mechanical Standards:
ANSI/IEC 60529-2004 - IP66 dust/water Ingress protection rating
EN62262:2002 – IK-10 impact rating

f) Video Compression Technology
H.264 MPEG-4, Part 10 ISO/IEC 14496-10 AVC

g) Networking Standard:
IEEE 802.3af-2003 PoE Standard, Class 3
IPv4

h) Interoperability Standard
PSIA compliant

i) Country of Origin
FTC "Made in USA" standard compliant

Part 2 Products

2.1 Manufacturer

Arecont Vision, LLC
425 E. Colorado St. #700
Glendale, CA 91205
Phone: 818-937-0700
877-226-3728
Fax: 818-937-0464
www.arecontvision.com

2.2 General

The AV1255PM MegaDome® 2 Stellar series network camera is part of Arecont Vision's full line of H.264 MegaDome® series cameras. STELLAR™ Low Light Technology Reduces Motion Blur, Noise and Storage Requirements, While Enhancing Contrast and Allowing Color Imaging in Near Complete Darkness. This fully compliant implementation of H.264 (MPEG 4, Part 10) provides full 1280 x 960 megapixel resolution at full video frame rates of 37fps. The AV1255 camera line provides an all-in-one solution with integrated 1.2MP resolution camera, remote focus, remote zoom, P-Iris 3-9mm lens, SD card (PM models), IP66 water/dust ingress rating and vandal resistant dome enclosure IK-10 rating.

With the features of CorridorView™ for 90°, 180° and 270° image rotation(PM models), PSIA conformance, privacy masking, extended motion detection and flexible cropping, the AV2255 is a high sensitivity, PoE (IEEE 802.3af) compliant camera with optional IR LEDs and manual lens configurations. Built with Arecont Vision's massively-

parallel MegaVideo® processing technology, this camera offers more than six times the resolution of standard resolution IP cameras with the ability to output full real-time frame rates and deliver the high quality megapixel imaging for both indoor and outdoor applications.

2.3 Hardware

- The camera shall utilize a high sensitivity 1.2 megapixel CMOS sensor with 1/3" optical format, 3.75um x 3.75um pixel size, progressive scan and active Pixel Count: 1280(H) x 960(V) pixel array.
- The camera shall have and integrated 3-9mm, Φ14mm Mount, megapixel IR corrected vari-focal lens with 1/2.7" optical format, F1.2 and Horizontal Field of View of 92°-31°.
- The camera shall have die-cast aluminum chassis with IK-10 vandal resistant dome. Entire enclosure to be rated minimum IP66 for water and dust protection.
- The camera shall have a 3-axis gimbal with 360˚ pan, 90˚ tilt and 180˚ Z-rotation for easy and accurate positioning.
- The camera shall contain an IR LED board with 24 pcs 850nm IR LEDs, 50 feet (15 meter) IR distance, 40° IR angle without any external power input. (PMIR model).
- The camera's power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard to support IR illuminator and camera.
- The camera shall have an auxiliary power input, AC24V and DC12-48V, to support IR illuminator and camera.
- The camera shall be utilized for indoor and outdoor applications.
- The camera shall have SD/SDHC card slot for onboard storage (-S models).

2.4 Imaging

- The camera shall have dual standard compression support with simultaneous streaming of both H.264 and MJPEG formats.
- The camera shall feature automatic exposure, automatic multi-matrix white balance, shutter speed control to minimize motion blur, programmable resolution, brightness, saturation, gamma, sharpness and tint.
- The camera's shutter speed shall be 1ms - 500ms.
- The camera shall feature selectable 50/60 Hz flicker control, windowing, simultaneous delivery of full-field view and zoomed images at video frame rate, instantaneous electronic zoom, pan and tilt, and electronic image rotation by 180 degrees
- The camera shall have CorridorView™ with 90°, 180° and 270° image rotation options (-S models)
- The camera shall have multi-streaming support of up to 8 non-identical concurrent streams (different frame rate, bit rate, resolution, quality, and compression format).
- The camera shall have wide dynamic range up to 83.5 dB and a maximum SNR of 54 dB
- The camera shall have privacy masking, the ability to select multiple regions of an arbitrary shape to block the video.
- The camera shall have Real Time Streaming Protocol (RTSP) support allowing for compatibility with media players such as Apple QuickTime, VLC Player and others.
- The camera shall have extended motion detection grid, a higher granularity grid of 1024 distinct motion detection zones. User can select between 64 zone based motion detection and extended motion detection to provide backward compatibility with the existing Video Management System (VMS) integration.
- The camera shall feature streaming of the full field of view (FOV) and simultaneous multiple regions of interest (ROI) for forensic zooming.
- The camera shall provide 21 levels of compression quality for optimal viewing and archiving.
- The cameras H.264 implementation shall maintain full real time video frame rates.
- The camera shall output at a maximum resolution of 1280(H) x 960(V) pixels up to frame rate of 37 frames per second (FPS). (PM model)

- The camera shall provide flexible cropping (Resolution windowing down to 1x1 pixels for JPEG and 2x2 pixels for H.264)
- The camera shall be able to save bandwidth & storage by running at 1/4 full resolution
- The camera shall have an Auto Exposure (AE), Gain Control (AGC), Bit Rate and Bandwidth Limit Control
- The camera shall feature MoonLight™ mode - extended exposure and noise cancellation
- The camera shall be able to support Picture-in-Picture: simultaneous delivery of full field of view and zoomed images
- The camera shall have 180° image flip or CorridorView™ (90°, 180° and 270° image rotation) (-S model)

2.5 Video

Video frame rate (up to):

37fps @ 1280x960

2.6 Protocols

- The camera shall have Real Time Streaming Protocol (RTSP) support allowing for compatibility with media players such as Apple QuickTime, VLC Player and others.
- The camera shall support both unicast and multicast communication protocol.
- The camera shall support RTSP, RTP over TCP, RTP over UDP (Unicast/Multicast), HTTP1.0, HTTP1.1, TFTP
- 100 Base-T Ethernet Network Interface
- Multi-streaming: 8 non-identical streams

2.7 Electrical

General purpose opto-coupled input and output
Power over Ethernet (PoE): PoE 802.3af
Auxiliary Power 12-48V DC, 24VAC
Power consumption: PoE – Class 3;

auxiliary- 12.4W max

2.8 IR Illuminator (-IR Model)

24 pcs 850nm LEDs / 50ft (15m) IR distance (max) / 40° IR angle (PMIR Model)
Total PoE Solution (No external power requirement)

2.9 Networking

The camera shall be equipped with a 100 Mbps LAN connector.

2.10 Environmental

Operating temperature :

-20°C (-4°F) to +50°C (122°F)

Motorized lens operating temperature -10˚C (14°F) to +50˚C (122 °F)
Stable image temperature 0˚C (32 °F) to +50˚C (122 °F)
Storage temperature -40°C (-40°F) to +60˚C (140 °F)
Humidity 0% to 90% (non-condensing)

2.11 Minimum Illumination

Color (Day Mode): 0.02 Lux
B/W (Night Mode): 0.002 Lux
B/W (Night Mode): 0 Lux , IR sensitive (with additional IR light source)

2.14 Packaging

Unit Dimensions (H x Dia) 4.9”H (125 mm) x 5.5” dia. (140 mm) Weight: 2.25 lbs (1.02 kg)
Packaged Dimensions (H x W x L) 6” (150mm) x 7.5” (190mm) x 8” (200mm) Weight: 2.8 lbs (1.27kg)

2.15 Compatible Accessories

MD-WMT2 – Wall Mount
MD-CMT – Pendant Mount
MD-CRMA – Corner Mount Adapter
MD-PMA – Pole Mount Adapter
MD-FMA – Flush Mount Adapter
SV-EBA – Electrical Box Adapter
SV-JBA – Junction Box Adapter

2.16 Related Documents

AV MegaDome® 2 Datasheet
AV MegaDome® 2 Installation Manual