AV5255AM	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.6-9mm Remote Zoom, Remote Focus and Auto Iris**
AV5255AM-A	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.6-9mm Remote Zoom, Remote Focus, Auto Iris and Audio**
AV5255AM-H	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.6-9mm Remote Zoom, Remote Focus, Auto Iris and Heater**
AV5255AM-AH	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.6-9mm Remote Zoom, Remote Focus, Auto Iris, Audio and Heater**
AV5255AMIR	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.6-9mm Remote Zoom, Remote Focus, Auto Iris, IR LEDs**
AV5255AMIR-A	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.6-9mm Remote Zoom, Remote Focus, Auto Iris, IR LEDs and Audio**
AV5255AMIR-H	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.6-9mm Remote Zoom, Remote Focus, Auto Iris, IR LEDs and Heater**
AV5255AMIR-AH	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.6-9mm Remote Zoom, Remote Focus, Auto Iris, IR LEDs, Audio and Heater**
AV5255PMTIR-H	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 9-22mm Remote Zoom, Remote Focus, P-Iris, IR LEDs, and Heater**
AV5255DN	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.4-10.5mm Manual Lens**
AV5255DN-H	**5 Megapixel H.264 Day/Night IP MegaDome® 2 Camera w/ 3.4-10.5mm Manual Lens and Heater**

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.

.

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

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 AV5255AM MegaDome® 2 series network camera is part of Arecont Vision's full line of H.264 MegaDome® series cameras. This fully compliant implementation of H.264 (MPEG 4, Part 10) provides full 2592 x 1944 megapixel resolution at full video frame rates of 14fps. The AV5255 camera line provides an all-in-one solution with integrated 5 megapixel camera, remote focus, remote zoom, auto iris lens (AM model) or P-Iris (PM model), 3.6-9mm (AM model) or 9-22mm (PMT model) lens options, IP66 water/dust ingress rating and vandal resistant dome enclosure IK-10 rating; the AV5255DN camera line provides an all-in-one solution with integrated 3.4-10.5mm manual lens.

With the features of binned mode, PSIA conformance, privacy masking, extended motion detection and flexible cropping, the AV5255 is a high sensitivity, PoE (IEEE 802.3af) compliant camera with optional heater, audio, IR LEDs and manual lens configurations. Built with Arecont Vision's massively-parallel MegaVideo® processing technology, this camera offers more than sixteen 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 5 megapixel CMOS sensor with 1/2.5" optical format, 2.2um x 2.2um pixel size, progressive scan and Active Pixel Count: 2592(H) x 1944(V) pixel array.
- The camera shall have and integrated 3.6-9mm, Φ14mm mount, megapixel IR corrected vari-focal lens with 1/2.5" optical format, F1.8 and horizontal field of view of 96°-36°. (AM models)
- The camera shall have and integrated 9-22mm, Φ14mm mount, megapixel IR corrected vari-focal lens with 1/2.5" optical format, F2.0 and horizontal field of view of 38°-16°. (PMTIR)
- The camera shall have an integrated 3.4-10.5mm, CS mount, megapixel IR corrected vari-focal lens with 1/2.5" optical format, F1.6 and horizontal field of view of 92°-36°. (DN models)
- 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. (AMIR model).
- The camera shall contain an IR LED board with 24 pcs 850nm IR LEDs, 120 feet (36 meter) IR distance, 30° IR angle without any external power input. (PMTIR model).
- The camera's power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard to support IR illuminator, heater 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.

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 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 70.1dB and a maximum SNR of 44.1dB.
- 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 2592(H) x 1944(V) pixels at a maximum frame rate of 14 frames per second (FPS).
- It shall be possible to program the camera to output a variety of lower resolution images, i.e. 2048(H) x 1536(V) pixels at 21 FPS.
- It shall be possible to program the camera at binning mode to improve low light performance and output a variety of lower resolution image, i.e. 1286(H) x 972(V) pixels at 34 FPS, or 1024(H) x 768(V) pixels at 46 FPS.
- 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

2.5 Video

Video frame rate (up to):

14fps @ 2592x1944
21fps @ 2048x1536
29fps @ 1920x1080
41fps @ 1280x1024

Video frame rate in binned mode (up to):

34fps @ 1286x972
46fps @ 1024x768
64fps @ 860x540

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;

6.1 Watts maximum for DN Model
10.3 Watts maximum for DN–H Model
9.7 Watts maximum for AM Model
11.9 Watts maximum for AMIR Model
10.3 Watts maximum for AM-H Model
12.4 Watts maximum for AMIR-H Model
14.4 Watts maximum for PMTIR-H Model

2.8 IR Illuminator (-IR Model)

24 pcs 850nm LEDs / 50ft (15m) IR distance (max) / 40° IR angle (AMIR Model)
24 pcs 850nm LEDs / 120ft (36m) IR distance (max) / 30° IR angle (PMTIR Model)
Total PoE Solution (No external power requirement)

2.9 Audio Electrical (-A and –AH Models)

Streaming	Two-way
Compression	G.711 PCM 8kHz
Input/Output	Microphone in or Line in / Line out

2.10 Heater Electrical (-H models only)

Power Output: 2.28 W Max
Switch: On: 4C° (32.9 °F), Off: 6.5 °C (43.7 °F)
Total PoE Solution: No external power requirement

2.11 Networking

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

2.12 Environmental

Operating temperature :

No Heater: -20°C (-4°F) to +50°C (122°F)
With Heater: -40°C (-40°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)

2.13 Minimum Illumination

Color (Day Mode): 0.3 Lux @ F1.2
Color Binning (Day Mode): 0.15 Lux @ F1.2

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