

AV2256PM Full HD 1080p WDR H.264 Day/Night IP MegaDome® 2 Camera w/ Remote Zoom, Remote Focus and P-Iris

AV2256PMIR Full HD 1080p WDR H.264 Day/Night IP MegaDome® 2 Camera w/ Remote Zoom, Remote Focus, P-Iris and IR LEDs

Bid-Spec

1.0 Description

The AV2256PM 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 1920 x 1080 megapixel resolution at full video frame rates of 32fps. The AV2256PM camera line provides an all-in-one solution with integrated 1080p WDR (wide dynamic range) resolution camera, remote focus, remote zoom, P-Iris lens, and IP66 and vandal resistant dome enclosure.

With the features of PSIA and ONVIF compliance, privacy masking, extended motion detection and flexible cropping, the AV2256PM is a high sensitivity, PoE (IEEE 802.3af) compliant camera with optional IR LEDs configuration. Built with Arecont Vision's massively-parallel MegaVideo® technology, this camera offers over 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.

2.0 Bid Specification

- The camera shall utilize a high sensitivity 2.07 Megapixel effective CMOS sensor with 1/3.2" optical format.
- The camera shall have and integrated 3-9mm, 14mm Mount, megapixel IR corrected vari-focal lens with F1.2 P-Iris lens and horizontal field of view of 27°-81°.
- The camera shall have a dome enclosure with IP66 for water and dust protection.
- The camera dome chassis shall be vandal resistant constructed of aluminum with a 4" polycarbonate dome bubble with IK10 impact rating.
- 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 be surface mount with optional pendant mount (MD-CMT), wall mount with cap (MD-WMT2), 1.5" NPT mount cap only (MD-CAP), junction box adapter (SV-JBA), electrical box adapter (SV-EBA), flush mount adapter (MD-FMA), corner mount adapter (MD-CRMA), and pole mount adapter (MD-PMA).
- The camera shall have dual standard compression support with simultaneous streaming of both H.264 and MJPEG formats.
- The camera is fully compatible with PSIA and ONVIF industry standard and passes conformance tests.
- The camera shall have privacy masking, the ability to select multiple regions of an arbitrary shape to block the video. This feature will support both HTTP and TFTP protocols, as well as the on-camera web interface.
- The camera shall have extended motion detection grid, a higher granularity grid of 1024 distinct motion detection. 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. This feature will support both HTTP and TFTP, as well as the on-camera web interface.
- The camera shall be able to be cropped to any resolution divisible by 2 and maintain H.264 compression.
- 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's shutter speed shall be 1ms - 500ms.
- 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's H.264 implementation shall maintain full real time video frame rates.
- The camera shall output at a maximum resolution of 1920(H) x 1080(V) pixels up to frame rate of 30 frames per second (FPS).
- It shall be possible to program the camera to output a variety of lower resolution image and increase frame rate, i.e. 1280(H) x 1024(V) pixels at 41 FPS.
- 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 be equipped with a 100 Mbps LAN connector.
- The camera shall provide 21 levels of compression quality for optimal viewing and archiving.
- The camera shall support a minimum HTTP1.0, HTTP1.1, RTSP, RTP over TCP, RTP over UDP and TFTP network protocols.
- The camera shall feature automatic exposure, automatic multi-matrix white balance, shutter speed control, 50/60Hz selectable flicker control, programmable brightness, saturation, gamma, sharpness, windowing and decimation, 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 incorporate necessary algorithms and circuits to detect motion in low light with clarity.
- The camera shall support a minimum illumination of 0.1 Lux @ F1.2 in color mode and 0 Lux in B/W mode.
- The camera's primary power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard.
- The camera shall have the alternative option to be powered via DC power from 12V to 48V DC or 24V AC power source.
- The camera shall be Class 3 PoE and have 10.7 watts max DC power consumption for base model and -A model.
- The camera shall be Class 3 PoE and have 12.6 watts max DC power consumption for IR model and IR-A model.
- The Camera shall provide total PoE solution to drive fan and IR LEDs without any external power input.
- The camera shall contain IR LED board with 24 pcs 850nm IR LEDs, 15 meter IR distance, 40° IR angle without any external power input. (IR version)
- The camera's operating ambient temperature shall be -40°C (-40°F) to 50°C (122°F), stable image temperature is 0°C (32 °F) to +50°C (122°F); storage temperature -40°C (-40°F) to +60°C (140 °F) at the humidity 0% to 90% (non condensing).
- The camera shall be compliant with EMI and EMC requirements, following European Standards EN55022 (Class A limits), EN55024 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11), EN61000-3-2 and EN61000-3-3, EN60950-1.
- The camera shall be compliant with EN62262 IK-10 Impact Rating and EN60529 IP66 Ingress Protection Rating.
- The camera shall be compliant with RoHS Directive 2011/65/EU.
- The camera shall be compliant with REACH Directive EC1907/2006.
- The camera shall be compliant with FTC "Made in USA" Standard.
- The camera shall bear CE mark and be UL listed.
- The camera shall have total unit dimensions of Ø5.5" (140.3mm) x 4.9" (124.6mm)H, Bubble only: Ø4.0" (102mm) x 2.4" (61.8mm) H.
- The camera shall have a total unit weight of: 2.25 lbs (1.02 kg)

Quick-Spec

3.0 Minimum Performance Specification

Megapixel camera must meet the following operating requirements

Operational

Imaging	2.07 megapixel effective CMOS image sensor 1/3.2" optical format Progressive scan
Active Pixel Count	1920(H) x 1080(V) pixel array
Minimum illumination	Color: 0.3 Lux @ F1.2 Day/Night: 0 Lux, IR sensitive
Dynamic range	up to 100 dB
Maximum SNR	49 dB

Full Field of View (FOV) Resolutions

1920x1080 (HxW) HDTV -1080P

960x540 (HxW) 1/4 resolution

Cropped Field of View Resolutions

Flexible Cropping: Crop to any resolution that is divisible by 2 pixel in H.264 and 1 pixel in JPEG up to the maximum resolution of the camera. Example resolutions include but not limit to the following.

1280x1024	1.3 MP
1280x720	HDTV - 720p
1024x768	XGA
800x600	SVGA
704x570	PAL
704x480	NTSC
640x480	VGA
352x288	CIF
320x240	SIF

Data Transmission

Video frame rate up to:

30fps @ 1920x1080

41fps @ 1280x1024

Compression type

H.264 (MPEG4, Part 10)

Motion JPEG

21 levels of quality

Transmission protocols

HTTP1.0, HTTP1.1, RTSP, TRP over TCP, RTP over UDP, TFTP

100 Base-T Ethernet Network Interface

Multi-streaming: 8 non-identical streams

Programmability

Auto adjustment between LDR and WDR modes

Remote Zoom, Remote Focus and P-Iris

Flexible cropping

Privacy masking

Low Light Noise Filter Control

Bit Rate and Bandwidth Limit Control

On-camera real-time motion detection with up to 1024 detection zones or 64 detection zones

Backlight compensation

Auto multi-matrix white balance

50/60Hz selectable flicker control

Electronic pan, tilt, zoom (PTZ)

Electronic image flip - 180 degree rotation

Programmable shutter speed to minimize motion blur

MoonLight™ mode - extended exposure and proprietary noise cancellation

Programmable resolution, brightness, saturation, gamma, sharpness, tint

Picture-in-Picture: simultaneous delivery of full field of view and zoomed images

Bandwidth & storage savings by running at 1/4 resolution

Camera Electrical

General purpose opto-coupled input and output

Power over Ethernet (PoE): PoE 802.3af Class 3

Power consumption:

10.7 Watts DC maximum for base model / -A model

12.6 Watts DC maximum for IR Model / - IR - A model

Auxiliary Power 12-48V DC, 24VAC

IR Illuminator (-IR models only)

24 pcs 850nm LEDs / 15 meter IR distance (max) / 40° IR angle

No external power required

Mechanical**• Casing**

- Die-casting aluminum chassis with 4" polycarbonate dome bubble
- IP66 rated for dust and water ingress
- Vandal-resistant, IK-10 protection rating

- Easily adjustable 3-axis camera gimbal w/360° pan, 90° tilt and 360° z-axis
- Total unit dimensions:
 - Ø 5.5" x 4.9" (H), bubble only: Ø 4.0" x 2.4" (H)
 - Ø 140.3mm x 124.6mm (H), bubble only: Ø 102mm x 61.8mm (H)
 - 2.25lbs (1.02kg)

Lens:

3-9mm, F1.2, remote focus, remote zoom, P-iris

HFOV=27°-81°

Environmental

Rated IP66 for water and dust protection

Operating temperature: -40°C (-40°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)

Compliance Information**Compliance:**

Class A FCC, Part 15; EN55022 Class A, EN55024, EN61000-3-2 and EN61000-3-3, EN60950-1

RoHS, REACH, IK-10 (EN62262), IP66 (EN60529)

CE Mark, UL Listed

Industry Standard

PSIA and ONVIF compliance

Accessories:

MD-WMT2: Wall Mount with Cap (1.5" NTP)

MD-CAP: 1.5" NTP Mount Cap

MD-CMT: Pendant Mount

MD-CRMA: Corner mount adapter

MD-PMA: Pole mount adapter

MD-FMA: Flush mount adapter

SV-EBA: Electrical Box Adapter for MD-WMT2

SV-JBA: Junction Box Adapter for MD-WMT2

Related Documentation

AV2256/AV3256 Camera Specification

Installation Manual

4.0 Model Numbers

The camera shall be Arecont Vision model AV2256PM, 1080p H.264 Day/Night IP MegaDome® 2 Camera w/ Remote Zoom, Remote Focus and P-Iris.

The camera shall be Arecont Vision model AV2256PMIR, 1080p H.264 Day/Night IP MegaDome® 2 Camera w/ Remote Zoom, Remote Focus, P-Iris and IR LEDs.

5.0 Warranty

Minimum 3 Year parts and labor

Arecont Vision reserves the right to change products or specifications without notice.