**AV2215DN Full HD 1080p Compact H.264 Day/Night Camera**

***Bid-Spec***

1. **Description**

The AV2215DN Full HD 1080p compact H.264 network camera is part of Arecont Vision’s full line of H.264 MegaVideo® 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 30 frames per second (fps). With the features of Casino Mode™, PSIA and ONVIF conformance, privacy masking, extended motion detection and flexible cropping, the AV2215DN is a high sensitivity, PoE (IEEE 802.3af) compliant camera with color, Day/Night and Day/Night with Auto-Iris configurations. Built with Arecont Vision’s massively-parallel MegaVideo® processing technology, this camera offers more than 6-times the resolution of standard resolution IP cameras with the ability to output full real-time frame rates and deliver high-quality megapixel imaging.

1. **Bid Specification**
* The camera shall utilize a high sensitivity 3 megapixel CMOS sensor with 1/3” optical format, 2.2um x 2.2um pixel size, progressive scan and Active Pixel Count: 1920(H) x 1080(V) pixel array
* The camera shall have dual standard compression support with simultaneous streaming of both H.264 and MJPEG formats.
* The camera shall be fully conformant with ONVIF industry-standards and pass conformance tests.
* The camera shall have Casino Mode™ to maintain 30fps or higher under any condition.
* The camera shall have privacy masking, the ability to select multiple regions of an arbitrary shape to block the video.
* The camera shall have an 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.
* The camera shall be able to be cropped to any resolution divisible by 2 and maintain H.264 compression. It shall be possible to crop the camera to output a variety of lower resolution images.
* 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 output at a maximum resolution of 1920(H) x 1080(V) pixels at a maximum frame rate of 30 frames per second (FPS).
* It shall be possible to program the camera to output a variety of lower resolution image, i.e. 1280(H) x 1024(V) pixels at 30 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’s shutter speed shall be 1ms - 500ms.
* The camera shall provide 21 levels of compression quality for optimal viewing and archiving.
* The camera shall support at minimum RTSP, RTP over TCP, RTP over UDP, HTTP and TFTP network 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 feature automatic exposure, automatic multi-matrix white balance, shutter speed control, 5Hz-255Hz adjustable 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 0.2 Lux in color mode.
* The camera shall support an IR sensitive minimum illumination of 0.02 Lux in black and white (B/W) mode with an additional IR light source.
* The camera’s primary power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard and provide at least 5.1W of power.
* The camera shall have the alternative option to be powered from between a 12V DC up to 48V DC or 24V AC power source.
* This camera shall feature a durable aluminum housing that minimizes fire hazards. Camera should be mounted using a 1/4” x 20 threaded hole at the bottom of the housing.
* The camera shall be utilized for indoor use but can be used in outdoor applications with an appropriate enclosure.
* 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 RoHS Directive 2002/95/EC.
* The camera shall be compliant with REACH Directive EC1907/2006.
* The camera shall be compliant with FTC "Made in USA" standard.
* The camera shall have CE marking and UL listed.
* The camera shall have dimensions of: 3” (76mm) W x 2.5” (63.5mm) H x 1.25” (31.7mm) D weighing 5.8oz (164g) without lens.
* The camera shall use a wide variety of C/CS mount 1/2.7” for larger lenses. (Note that some CS lenses maybe require a washer and all C-mount lenses require a C/CS adaptor ring and maybe a washer. Megapixel quality lenses are the preferred choice for Arecont Vision’s entire camera line.)
* The camera has SNAPstream™, which is smart noise adaptation and processing.
* The camera shall have CorridorView™ (90°, 180°, and 270° image rotation).

#### Quick-Spec

1. **Minimum Performance Specification**

Megapixel camera must meet the following operating requirements

**Operational**

Imaging 3 megapixel CMOS image sensor

1/3” optical format

Active Pixel Count 1920(H) x 1080(V) pixel array

Minimum illumination Color: 0.2 Lux

Day/Night: 0.02 Lux, IR sensitive

Dynamic range 69.5 dB

Maximum SNR 44 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 pixels in H.264 and 1 pixel in MJPEG up to the maximum resolution of the camera. Example resolutions include but not limited 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

31fps @ 1920x1080

42fps @ 1280x1024

Compression type

H.264 (MPEG-4, Part 10)

Motion JPEG (MJPEG)

21 levels of quality

Transmission protocols

HTTP1.0, HTTP1.1, RTSP, TRP over TCP, RTP over UDP, TFTP and 802.1x

100 Base-T Ethernet Network Interface

Multi-streaming: 8 non-identical streams

**Programmability**

Casino Mode™

Flexible Cropping

Privacy Masking

Low-Light Noise Filter Control

Bit-Rate and Bandwidth Limitation Control

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

Auto Backlight Compensation

Auto Multi-Matrix White Balance

5Hz-255Hz Adjustable Flicker Control

Electronic Pan, Tilt, Zoom (PTZ)

Electronic Image Flip – 180-Degree Rotation

Resolution Windowing Down to 1x1 Pixels for MJPEG and 2x2 Pixels for H.264

Programmable Shutter Speeds 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 and Storage Savings by Running at 1/4 Resolution

**Electrical**

General purpose opto-coupled input and output

Power over Ethernet (PoE): PoE 802.3af for camera

Auxiliary power 12–48V DC, 24V AC

Power consumption: 5.1 Watts maximum

**Mechanical**

Dimensions(H x W x D)……….3”W (76 mm) x 2.5”H (63.5 mm) x 1.25”D (31.7mm) (w/o lens)

Weight…………………………..5.8oz (164g) (w/o lens)

Lens.……………………………C/CS lens mount

**Environmental**

Operating temperature -5˚C (23 °F) to +50˚C (122 °F)

Storage temperature -20˚C (-4 °F) to +60˚C (140 °F)

Humidity 0% to 90% (non-condensing)

**Compliance Information**

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

RoHS, REACH, CE Mark, UL Listed

**Industry Standard**

ONVIF Conformance

**Housing Accessories:**

D4F: Indoor 4" In-Ceiling Flush Mount Dome

D4SO: Outdoor 4" IP66, IK-10, Dome Housing

HSG2: Outdoor Ip67 Housing with Heater and Dual Fans

**Lenses:**

MPL1.55

MPL3.5

MPL4.0

MPL8.0

MPL33-12A

MPL4-10

MPL4-12

MPL8-16

MPL12-40

UHD45-10

JHF25M-5MP

JHF35M-5MP

**Related Documentation**

AV2215DN Camera Specification

Installation Manual

**4.0 Model Numbers**

The camera shall be Arecont Vision model AV2215DN, HD 1080p Compact H.264 Color Camera

**5.0 Warranty**

Minimum 3 Year parts and labor

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



[www.megapixelvideo.com](http://www.megapixelvideo.com) info@arecontvision.com © 2005 Arecont Vision