

## AV12186DN 12 Megapixel WDR 180° Panoramic H.264 Day/Night Camera

## AV12366DN 12 Megapixel WDR 360° Panoramic H.264 Day/Night Camera

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](http://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



- 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](http://www.arecontvision.com)**

### 2.2 General

The AV12186DN and AV12366DN SurroundVideo® series network camera is WDR (Wide Dynamic Range), dual encoder (H.264 & MJPEG), 12 Megapixel resolution, 180 degree or 360 degree panoramic Day/Night IP camera, designed to provide an all-in-one solution with four integrated 3-Megapixel WDR sensors, IK-10 vandal resistant dome and housing, rated IP66 for water and dust protection, to use camera for indoor and outdoor applications.

The AV12186DN and AV12366DN are a PoE (IEEE 802.3af) compliant Day/Night camera, featuring WDR, PSIA compliance, privacy masking, extended motion detection and flexible cropping.

Built with Arecont Vision’s proprietary massively-parallel MegaVideo® technology, the AV12186DN and AV12366DN have the ability to output multiple image formats allowing simultaneous viewing of the full resolution field of view and regions of interest for high definition forensic zooming.

Binning technique improves low-light performance, increases sensitivity and produces better SNR by combining and averaging pixels. This camera offers over ten times the resolution of standard-resolution IP cameras with the ability to output full frame rates.

## 2.3 Hardware

- The camera shall utilize four high sensitivity 3-Megapixel WDR CMOS sensors with 1/3.2" optical format, progressive scan and Active Pixel Count: 2048(H) x 1536(V) pixel array
- The camera shall integrate four 5.4mm M12 megapixel IR corrected lenses, 1/3.2", F2.0, Horizontal Field of View of 46.5°. ( AV12186DN)
- The camera shall integrate four 2.6mm M12 megapixel IR corrected lenses, 1/2.5", F2.0, Horizontal Field of View of 96°. ( AV12366DN)
- 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 2-axis easily adjustable gimbal with 360° pan and 90° tilt for easy and accurate positioning.

## 2.4 Imaging

- The camera shall combine four images for a 180 degree horizontal field of view. (AV12186DN)
- The camera shall have dual standard compression support with simultaneous streaming of both H.264 and MJPEG formats.
- Each sensor of 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 +/-5° digital vertical alignment to adjust images. (AV12186DN)
- The camera shall have +/-7° mechanical tilt adjustment to locate each sensor angle. (AV12366DN)
- 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 100 dB and a maximum SNR of 51 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 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. This feature shall support RTP, HTTP and TFTP protocols, as well as the on-camera web interface.
- 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.
- It shall be possible to program the camera in binning mode to output lower resolution images: i.e. 4096(H) x 768(V) pixels (1/4 full resolution) at 17 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 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):

5.2FPS @ 8192x1536

17 FPS @ 2048x1536

Video frame rate in binning mode up to:

17 FPS @ 4096x768

## 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 active connections to each sensor)

## 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- 14W max

## 2.8 Networking

The camera shall be equipped with a 100 Mbps LAN connector

## 2.9 Environmental

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)

## 2.10 Illumination

Color (non-binning): 0.5 Lux @ F2.0

Color (binning): 0.25 Lux @ F2.0

B/W: 0 Lux, IR sensitive (with additional IR light source)

## 2.11 Packaging

Unit Dimensions (H x Dia) 4.9" H (125 mm) x 5.5" dia. (140 mm) Weight: 2.8 lbs (1.27kg)

Packaged Dimensions (H x W x L) 6" (150mm) x 7.5" (190mm) x 8" (200mm) Weight: 3.4 lbs (1.54kg)

## **2.12 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

## **2.13 Related Documents**

AV12186DN/AV12366DN Datasheet

AV12186DN/AV12366DN Installation Manual