**AV2196DN 1080P MegaVideo Flex, WDR, Day/Night, 1920x1080, 30 fps, MJPEG/H.264, Remote Focus, SD Card, 2.8mm Lens, Scaling, Discreet, IK-10, 12VDC/24VAC/PoE**

**AV2196DN-NL 1080P MegaVideo Flex, WDR, Day/Night, 1920x1080, 30 fps, MJPEG/H.264, Remote Focus, SD Card, Scaling, Discreet, IK-10, 12VDC/24VAC/PoE, No Lens**

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.

**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.

## Certifications and Standards

1. European Community Directives:

2014/30/EU (EMC Directive);

2014/35/EU (Low Voltage Directive);

2011/65/EU (RoHS Directive)

1907/2006/EC (REACH Directive)

2012/19/EU (WEEE Directive)

1. 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+A2:2013



1. FCC Standard Compliance:

Title 47, Part 15 (47 CFR 15) Subpart B Class A

1. Mechanical Standard:

Shock and vibration (EN61373)

EN 62262:2002 – IK-10 impact rating

1. Video Compression Technology

H.264 MPEG-4, Part 10 ISO/IEC 14496-10 AVC

1. Networking Standard:

IEEE 802.3af-2003 PoE Standard, Class 3

IPv4, IPv6

1. Interoperability Standard

ONVIF Profile S and PSIA compliant

1. Country of Origin

FTC “Made in USA” standard compliant

1. UL Listing
2. CB Test Report (IEC 60950-1(Ed.2), IEC 60950-1(Ed.2); Am.1) and (IEC 60950-1(Ed.2); Am.2, IEC 60950-22(Ed.1))



## Part 2 Products

**2.1 Manufacturer**

**Arecont Vision, LLC**

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**Glendale, CA 91205**

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**877-226-3728**

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**2.2 General**

The AV2196DN MegaVideo® Flex 1080p WDR full HD network camera is part of Arecont Vision’s full line of H.264 MegaVideo® Flex 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). The AV2196DN camera provides an all-in-one flush mount solution with an integrated 1080p full HD WDR camera, a remote focus module and a 2.8mm IR corrected lens. The AV2196DN-NL version does not include a lens. With the features of PSIA and ONVIF conformance, unlimited privacy masking, extended motion detection and flexible cropping, the AV2196DN series is a high sensitive, PoE (IEEE 802.3af) compliant camera with a true day/night IR cut filter. Built with Arecont Vision® 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.

**2.3 Hardware**

* The camera shall utilize a high sensitivity 1080p-megapixel CMOS sensor with 1/3.2” optical format, 2.2um x 2.2um pixel size, progressive scan and active Pixel Count: 1920(H) x 1080(V) pixel array.
* The AV2196DN camera shall have an integrated 2.8mm M12 mount, megapixel, IR corrected, fixed focal lens with 1/2.5" optical format, F2.0 and horizontal field-of-view of 83°.
* The AV2196DN-NL camera shall not include a lens.
* The camera shall feature the ability to interchange the lenses.
* The camera’s power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard and provide at least 10.1W of power.
* The camera shall have an integrated Remote Focus module.
* The camera sensor and Main Unit can be connected via USB cable up to 40ft in length.
* The Camera shall be utilized for indoor use and shall have water resistant housing in front.
* Alarm Input/Output: General purpose opto-coupled, 1 Input/1 Output.
* The camera shall include a separate main unit.
* The camera shall include a surface mount bracket.
* The camera shall include one white and one black dome trim ring.
* The camera shall include a 5ft and a 40ft cable.
* The main unit shall feature an SDHC card slot supporting up to 32GB of storage capacity for onboard storage.
* The camera shall also have an optional IR accessory AV-IRF and MF-FMA.

**2.4 Imaging**

* 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 PSIA and ONVIF industry-standards and pass conformance tests.

The camera shall have unlimited 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. The 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 have multi-streaming support of up to 8 non-identical concurrent streams (different frame rate, bitrate, resolution, and quality and compression format).
* The camera shall have wide dynamic range up to 100dB.
* The camera shall output at a maximum resolution of 1920(H) x 1080(V) pixels at a maximum frame rate of 30fps.
* The camera shall provide flexible cropping resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264.The camera shall feature streaming of the full field-of-view (FOV) and simultaneous multiple regions of interest (ROI) for forensic zooming.
* The camera’s shutter speed shall be 1ms - 500ms and controls motion blur.
* The camera shall provide 21 levels of compression quality for optimal viewing and archiving.
* The camera shall feature automatic exposure, custom white balance, shutter speed control, 5 to 255Hz adjustable flicker control, programmable brightness, saturation, gamma, tint, sharpness, windowing and decimation, simultaneous delivery of full-field view and zoomed images at video frame rate, instantaneous electronic zoom, pan and tilt with a selectable enhancement level.
* The camera shall have noise reduction with low light filter control.
* The camera shall auto adjustment between WDR and LDR modes.
* The camera shall have a dynamic range of up to 100db at full resolution.
* 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 shall feature Moonlight™ Mode which is an extended exposure and proprietary noise cancellation.
* The camera shall have bandwidth and storage savings by running at ¼ resolutions, as well as bit rate and bandwidth limitation control.
* The Camera shall have CorridorView™ (90°, 180°, and 270° image rotation) for better pixel optimization in hallways and corridors.

This Camera shall have Snapstream™ (Smart Noise Adaptation and Processing) capability to reduce bandwidth without impacting image quality.

**2.5 Video**

Video frame rate (up to):

30FPS @ 1920 x 1080

Video frame rate in cropped mode up to:

30FPS @ 1280 x 1024

**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 at minimum RTSP, RTP over TCP, RTP over UDP (Unicast/Multicast), HTTP1.0, HTTP1.1, DHCP, TFTP, QoS, IPv4, IPv6 and 802.1x network protocols.
* 100 Base-T Ethernet Network Interfaces.
* Multi-streaming: 8 non-identical streams.

**2.7 Electrical**

* General purpose opto-coupled 1 input and 1 output
* Power over Ethernet (PoE): PoE 802.3af for camera
* Power Consumption: PoE – Class 3
* Auxiliary Power 12-48V DC, 24VAC (Barrel Plug, 2.1mm I.D. x 5.5mm O.D. x 9.5mm)
* Auxiliary DC Power Consumption:
* AV2196DN No IR: 10.1 Watts
* AV2196DN with 1 IR : 11.8 Watts
* AV2196DN with 2 IR : 14.2 Watts

**2.8 Networking**

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

**2.9 Environmental**

* Operating temperature -20˚C (-4 °F) to +50˚C (122 °F)
* Stable image temperature 0˚C (32 °F) to +50˚C (122 °F)
* Storage temperature -20˚C (-4 °F) to +60˚C (140 °F)
* Humidity 0% to 90% (non-condensing)

**2.10 Illumination**

Color (Day Mode): 0.2 Lux

B/W (Night Mode): 0.02 Lux, IR sensitive

**2.11 Packaging**

Total Unit Dimensions:

Packaged Dimensions:

* 6” W(152.4mm) x 6” L (152.4mm) x 6” H (152.4mm), Weight of 2.55lb (1.16kg)

**2.12 Compatible Lenses**

MPM2.1 2.1mm M12-mount, Fixed iris, IR corrected

MPM2.8A2.8mm M12-mount, Fixed iris, IR corrected

MPM4.0A 4mm M12-mount; Fixed iris, IR corrected

MPM6.0 6mm M12-mount; Fixed iris, IR corrected

MPM8.0 8mm M12-mount; Fixed iris, IR corrected

MPM12.0A 12mm M12-mount, Fixed iris, IR corrected

MPM16.0 16mm M12-mount; Fixed iris, IR corrected

**2.13 Compatible Accessories**

AV-IRF Single IR illuminator includes 6 pcs 850nm LEDs / 15 meter IR distance (max) / 80° IR angle, for use with MegaVideo Flex only

MF-FMA Flush mount for Megavideo Flex

**2.14 Related Documents**

MegaVideo FlexDatasheet

MegaVideo Flex Installation Manual

**2.15 Warranty**

Limited 3-Year Parts and Labor

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

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