**AV2856DNIR-F 1080P CONTERAIP MICRODOME LX, WDR, 1920X1080, 60FPS, REMOTE FOCUS, IR, 2.8MM LENS, AI VA, FLUSH MOUNT**

**AV2856DNIR-S 1080P CONTERAIP MICRODOME LX, WDR, 1920X1080, 60FPS, IR, REMOTE FOCUS, IR, 2.8MM LENS, AI VA, SURFACE MOUNT**

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.

##  Certifications and Standards

1. 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)

1. European EMC Standards to which conformity is declared:

 EN 55032:2015 + A11: 2020

 EN 55035:2015 + A11: 2020

 EN 61000-3-2:2014

 EN 61000-3-3:2013+ A1: 2019

 

1. UL Listing

CB Test Report (IEC 60950-1 (ed. 2) and IEC 60950-22 (ed. 1)), E489591

 

1. FCC Standard Compliance:

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

1. Mechanical Standards:

ANSI/IEC 60529-2004 - IP66 dust/water Ingress protection rating *(IR-S model only)*

EN62262:2002 – IK-10 impact rating

1. Video Compression Technology

H.265/H.264 MPEG-4, Part 10 ISO/IEC 14496-10 AVC/Motion JPEG

1. Networking Standard:

 IEEE 802.3af-2003 PoE Standard, Class 3

1. NDAA

Compliant

1. TAA

 Compliant

## Part 2 Products

**2.1 Manufacturer**

**Arecont Vision Costar, LLC**

**642 Pollasky Avenue, Suite 230**

**Clovis, CA 93612**

**Phone: 818-937-0700**

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

**2.2 General**

The ConteraIP MicroDome LX megapixel cameras feature 1080p, 5 and 8 - megapixel (MP) resolutions for optimum performance with a day/night mechanical IR cut filter and interchangeable lenses. Regardless of the time of day, the ConteraIP MicroDome LX is prepared for any lighting condition. For applications with poor lighting conditions, Enhanced WDR (wide dynamic range) at 120dB provides the best visual balance to shaded and bright light conditions. For clear color images in low-light, NightView offers strong low-light sensitivity for capturing details in extremely poor-lit scenes and is further enhanced in all models by built-in IR LED illumination.

ConteraIP MicroDome LX cameras deliver professional surveillance, with ease of installation and set-up, for a variety of network surveillance requirements. The three-axis lens adjustment provides users with more camera placement options and the remote focus module allows users to adjust the camera focus after installation. An innovative spring arm design makes in-ceiling -F model installations a snap: simply slide the camera through the hole and secure the magnetized cover ring with a single screw. No additional hardware is required. The ConteraIP MicroDome LX camera series is available in an indoor, in-ceiling housing or in a surface mount IP66 rated version for indoor and outdoor applications. All models feature a vandal resistant, IK-10 rated cast-aluminum housing with a polycarbonate bubble making it capable of withstanding the equivalent of 55 kg (120 lbs) of force.

AV Costar™ was the first to bring H.264 to the mainstream market and recently developed SNAPstream™ (Smart Noise Adaptation and Processing) technology for reducing bandwidth without impacting image quality. Today we are proud to offer our next generation H.265 with SNAPstream+ smart codec capable of delivering high quality video while saving over 50% of the data rate to reduce or prevent strain on the network.

The SD card slot supports up to 1TB of storage capacity for convenient onboard storage. The camera’s power can be supplied via a Power-over- Ethernet (PoE - IEEE 802.3af) compliant network cable connection.

The ConteraIP MicroDome LX is ONVIF (Open Network Video Interface Forum) Profile S, G, T and M conformant, providing interoperability between network video products regardless of manufacturer.

**2.3 Hardware**

* The camera shall utilize one high sensitivity 2.1 Megapixel CMOS sensor with 1/2.8” optical format, 2.9um x 2.9um pixel size, progressive scan and Active Pixel Count: 1920(H) x 1080(V) pixel array.
* The camera shall have a 3-axis easily adjustable gimbal with 359˚ pan and 90˚ tilt for easy and accurate positioning.
* The camera shall have an integrated Remote Focus module.
* The camera shall have an integrated 2.8mm M12 mount, megapixel, IR corrected, fixed focal lens with 1/2.7" optical format, F/1.6 and horizontal field-of-view of 106.7°.
* The camera’s power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard.
* The camera shall have SDHC card slot for onboard storage up to 1TB, class 10 and UHS-1.
* Alarm Input/Output: General purpose opto-coupled, 1 Input/1 Output.
* The camera shall have an IK-10 rated vandal resistant dome enclosure with IP66 weatherproofing standard. (-S model only)
* The camera shall have an IK-10 rated vandal resistant dome enclosure. (-F model only)
* The camera shall have a 3/8” NPT port with a 3/8” male to 1/2” female NPT adapter included. (-S model only)
* The camera shall be utilized for indoor and outdoor applications. (-S model only)
* The camera shall be utilized for indoor use only. (-F model only)
* The camera’s lens shall be interchangeable with other focal lengths - ordered separately.
* The camera shall be NDAA and TAA compliant.

**2.4 Imaging**

* The camera shall have standard compression support with simultaneous streaming of H.265, H.264 and MJPEG formats.
* The camera shall feature automatic exposure, automatic multi-matrix white balance, shutter speed control to minimize motion blur, programmable brightness, saturation, sharpness, contrast and hue.
* The camera’s shutter speed shall be 0.1ms - 500ms.
* The camera shall feature 5-255Hz flicker control.
* The camera shall have multi-streaming support of up to two H.265/ H.264 streams and one M-JPEG stream.
* The camera shall have wide dynamic range up to 120dB and a maximum SNR of 48dB.
* 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 provide 21 levels of compression quality for optimal viewing and archiving.
* The cameras H.265/ 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 60 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 720(V) pixels at 30 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, and Bandwidth Limit Control.
* The camera shall be able to have below scaled resolutions: 1920x1080, 1280x720, 960x540, 640x480, 640x360.
* The camera shall feature MoonLight™ mode - extended exposure and noise cancellation
* This camera shall have SNAPstream+™ (Smart Noise Adaptation and Processing) capability to reduce bandwidth without impacting image quality.
* The camera shall have CorridorView™ (90°, 180°, and 270° image rotation) + mirror.
* The camera shall support IR functions.
* The camera shall have On-Screen Display (OSD).
* The camera shall have standard AI VA (video analytics) for motion detection, camera tamper, intrusion detection, line crossing, and loitering
* The camera shall have advanced (optional) AI VA for object classification of persons/vehicles, objects left/removed, and people/vehicle counting.

**2.5 Video**

* Video frame rate (up to):

60fps @ 1920x1080

60fps @ 1920x1080+ 60fps @ 1920x1080

60fps @ 1920x1080 + 60fps @ 1280x720 + 30fps @ 640x360

* Scaled Resolution:

1920x1080, 1280x720, 960x540, 640x480, 640x360

**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 SNMP, IPv6, IPv4, HTTP, HTTPS, SSL, LDAP, TCP/IP, UPnP, UDP, RTCP, RTSP, RTP, SMTP, NTP, DHCP, FTP, 802.1x, Zero Configure.
* 10/100 Base-T Ethernet Network Interface, RJ45

**2.7 Electrical**

Alarm Input(Wet Contact) and Alarm Output(Wet Contact)

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

Power consumption: PoE – Class 3; 8.5 Watts maximum

**2.8 IR Illuminator**

3 pcs 850µm LEDs/ 50ft (15m) IR distance (max)

Total PoE Solution (No external power requirement)

**2.9 Networking**

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

**2.10 Environmental**

Operating temperature:

-5°C (23°F) to +50°C (122°F) (-F model)

-20°C (-4°F) to +50°C (122°F) (-S model)

Storage temperature: -40°C (-40°F) to +60˚C (140 °F)

Humidity 0% to 90% (non-condensing)

**2.11 Minimum Illumination**

Color (Day Mode): 0.04 Lux

B/W (Night Mode): 0.004 Lux

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

**2.12 Packaging**

Unit Dimensions: Ø 4" (100mm) x 3.1" (78.5mm) Weight: 0.95 lbs (0.43 kg)

Packaged Dimensions (H x W x L): 3.5" (90mm) x 5.6" (142mm) x 5.6" (142mm) Weight: 1.3 lbs (0.6kg)

**2.13 Compatible Accessories**

**-S Model Only**

AV-CRMA-W Corner Mount Adapter (AV Costar White)

AV-JBA-W Junction Box Adapter (AV Costar White)

AV-PMA-W Pole Mount Adapter (AV Costar White)

MCD-CMT-W Pendant Mount (AV Costar White)

MCD-WMT-W Wall Mount (AV Costar White)

MCD-EBA Round Electrical Box Adapter Plate (AV Costar Gray)

MCD-JBAS Mount Plate for use with AV-JBA Round Electrical Box Adapter Plate (AV Costar Gray)

MCD-CRMT In-room Corner Mount Adapter (AV Costar Gray) (No IR Function)

MCD-4S Electrical Box Surface Mount Cover Fits 3rd Party 4-inch Square Box 2-1/8 Inch Deep (e.g. Lowe's® Item # 4788) (AV Costar Gray) (No IR Function)

**2.15 Compatible Lenses**

MPM2.4 2.1mm M12-mount, Fixed iris, IR corrected

MPM2.8C2.8mm 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

**2.16 Related Documents**

ConteraIP® MicroDome LX Datasheet

ConteraIP® MicroDome LX Installation Manual