**AV02CLD-200 1080P CONTERA RUGGED OUTDOOR DOME 1920X1080 H.265/H.264/M-JPEG, WDR 120DB, NIGHTVIEW, SNAPSTREAM+, 2.7-13.5MM LENS, 60FPS, REMOTE ZOOM, REMOTE FOCUS, AI VA, SMART IR, SD CARD, ONVIF, POE**

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. FCC Standard Compliance:

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

1. UL Listing

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

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 Contera® Rugged Outdoor Dome megapixel camera features 1080p, 5 and 8-megapixel (MP) resolution for optimum performance. The Contera Outdoor Dome combines a day/night mechanical IR cut filter with an integrated motorized remote focus and zoom varifocal lens for excellent, optimal image quality. Regardless of the time of day, the Contera Outdoor Dome 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. Built-in Smart IR LED illumination automatically adjusts output in response to the distance of an object in view to prevent over-exposure when the object is very close to the camera.

Arecont Vision 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 Contera Outdoor Dome 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 have a diecast aluminum ruggedized body and dome cover.
* The camera shall meet IP66 requirements for water and dust ingress.
* The camera shall meet IK10 requirements for operational shock requirements.
* The camera shall utilize a 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 and integrated 2.7-13.5 mm, megapixel IR corrected vari-focal lens with F1.4 lens and horizontal field of view of 105°-28°.
* The camera shall have a 3-axis gimbal with 350˚ pan, 60˚ tilt and 350˚ Z-rotation for easy and accurate positioning.
* The camera’s power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard to support IR illuminator and camera.
* The camera shall have SDHC card slot for onboard storage up to 1TB, class 1- and UHS-1.
* The camera shall have additional alarm in/out on cable on pigtail cable.
* The camera shall be utilized for outdoor/indoor applications.
* 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 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.
* 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 Enhanced WDR (wide dynamic range) up to 120dB and a maximum SNR of 45dB.
* 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 feature streaming of the full field of view (FOV) and multiple regions of interest (ROI) for forensic zooming.
* 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) and On-Screen Display (OSD).
* The camera shall support Smart IR and Defog function.
* 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.
* 100 Base-T Ethernet Network Interface

**2.7 Electrical**

Alarm Input(Dry Contact) and Alarm Output(Dry Contact)

Power over Ethernet (PoE): PoE 802.3af

Auxiliary Power 12VDC

Power consumption: PoE – Class 3; 8.5 Watts maximum

**2.8 IR Illuminator**

4 pcs 850nm LEDs/ 66ft (20m) 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: -20°C (14°F) to +50°C (122°F)

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, IR sensitive



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

**2.12 Packaging**

Unit Dimensions (H x Dia) 4.09”H (104 mm) x 5.55” dia. (141 mm) Weight: 2.09 lbs (0.95 kg)

Packaged Dimensions (H x W x L) 5.9” (150mm) x 6.7” (170mm) x 7.28” (185mm) Weight: 2.16 lbs (.098kg)

**2.13 Related Documents**

Contera® Outdoor Dome Datasheet

Contera® Outdoor Dome Installation Manual



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