AV3555DN-S **3MP MICRODOME® G2, DAY/NIGHT, 2048X1536, 21 FPS, MJPEG/H.264, REMOTE FOCUS, 2.8MM LENS, SURFACE MOUNT, INDOOR/OUTDOOR, IP66, IK10, POE, 3 AXIS GIMBAL**

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.
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.

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

CE

c) FCC Standard Compliance:
Title 47, Part 15 (47 CFR 15) Subpart B Class A

d) Mechanical Standards:
ANSI/IEC 60529-2004 - IP66 dust/water Ingress protection rating
ANSI/IEC 62262- IK-10 vandal resistant dome

e) Video Compression Technology
H.264 MPEG-4, Part 10 ISO/IEC 14496-10 AVC

f) Networking Standard:
IEEE 802.3af-2003 PoE Standard, Class 3
IPv4, IPv6

g) Interoperability Standard
ONVIF Profile S and PSIA compliant

h) Country of Origin
FTC "Made in USA" standard compliant

I) UL Listing

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

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

2.2 General

The AV3555DN-S MicroDome® G2 3MP series network camera is part of Arecont Vision's full line of H.264 MicroDome® G2 cameras. This fully compliant implementation of H.264 (MPEG 4, Part 10) provides 2048x1536 megapixel resolution at full video frame rates of 21 frames per second (fps). The AV3555DN-S camera line provides an all-in-one solution with integrated 3MP full HD camera, a remote focus module, IR corrected lens, mechanical true day/night IR cut filter, and IK-10 vandal resistant aluminum dome enclosure with IP66 weatherproofing standard. With the features of ONVIF and PSIA compliance, pixel binning, unlimited privacy mask, extended motion detection and flexible cropping, the AV3555DN-S is a high sensitivity, PoE (IEEE 802.3af) compliant true Day/Night camera. 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 for indoor/outdoor applications.

2.3 Hardware

- 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: 2048(H) x 1536(V) pixel array.
- The camera shall have and integrated 2.8mm, M12 Mount, megapixel IR corrected fixed-focal lens with 1/2.5" optical format, F/2.0 and Horizontal Field of View of 89°.
- 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 IK-10 rated vandal resistant dome enclosure with IP66 weatherproofing standard.
- The camera's power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard.
- The camera shall be utilized for indoor and outdoor applications.
- Alarm Input/Output: General purpose opto-coupled, 1 Input/1 Output.

2.4 Imaging

- The camera shall have dual standard compression support with simultaneous streaming of both H.264 and MJPEG formats.
- 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 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 dynamic range up to 69.5dB and a maximum SNR of 49dB.
- 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 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 have a tamper-resistant housing of surface mount with die-cast aluminum cover and 2" polycarbonate dome bubble.
- 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.
- The cameras H.264 implementation shall maintain full real time video frame rates.
- The camera shall output at a maximum resolution of 2048(H) x 1536(V) pixels up to frame rate of 21 frames per second (FPS).
- It shall be possible to program the camera to output a variety of lower resolution image and increase frame rate, i.e. 1280(H) x 1024(V) pixels at 41 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 have an Auto Exposure (AE), Gain Control (AGC), Bit Rate and Bandwidth Limit Control.
- 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.
- The camera shall support a programmable binned mode to output a variety of lower resolution image and increase frame rate, e.g. 1024(H) x 768(V) pixels at 46 FPS, or 960(H) x 540(V) pixels at 64 FPS.
- The Camera shall have CorridorView™ (90°, 180°, and 270° image rotation).

2.5 Video

Video frame rate (up to):

21FPS @ 2048x1536
41FPS @ 1280x1024

Video frame rate in binning mode up to:

46FPS @ 1024x768
64FPS @ 960x540

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, DHCP, QoS, IPv4 and IPv6.
- 100 Base-T Ethernet Network Interface.
- 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
- Power consumption: PoE – Class 3
- AV3555DN-S: 5.59 Watts maximum PoE Class 3

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)
- Motorized lens operating temperature -20˚C (-4°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 Minimum Illumination

Color (Day Mode): 0.2 Lux
B/W (Night Mode): 0.02 Lux, IR Sensitive
Color (Binning): 0.1 Lux

2.11 Packaging

Total Unit Dimensions:

• ϕ 2” (52mm) Bubble (ϕ 4” (100mm) Cover) x 1.5” (38mm) H Installed (3” H total)

Weight: 1.2lbs (0.58kg)
Packaged Dimensions: 5.6" W (142mm) x 5.6" L (142mm) x 3.5" H (90mm), Weight of 1.3lbs (0.6kg)

2.12 Compatible Accessories

MCD-WMT	Wall Mount with Junction Box
MCD-CMT	Pendant Mount with Junction Box
AV-EBA	Electrical Box Adapter Plate
MCD-4S	Electrical Box Adapter Cover For MicroDome® (Fits Common 4S Junction Box)
AV-CRMA	Corner Mount Adapter
AV-PMA	Pole Mount Adapter

2.13 Compatible Lenses

MPM2.1	2.1mm M12-mount, Fixed iris, IR corrected
MPM2.8A	2.8mm 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

2.14 Related Documents

MicroDome® G2 Datasheet
MicroDome® G2 Installation Manual

2.15 Warranty

Limited 3-Year Parts and Labor

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