**Surround**Video® OmniG3

**AV20375RS**

**SURROUNDVIDEO OMNI G3, 20 MEGAPIXEL, REMOTE SETUP WITH REMOTE FOCUS, ZOOM, PAN, TILT & DAY/NIGHT H.264/MJPEG OMNI-DIRECTIONAL CAMERA G3, 4 X 2560X1920, 4 X 3-6MM MOTORIZED LENS, SURFACE MOUNT, INDOOR/OUTDOOR, IP66, IK-10, 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.

**Division 28 – Electric Safety and Security**

**Section 28.23.29 – Video Surveillance – Remote Devices and Sensors**

**Part 1 General**

##  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: 2014

 EN 61000-3-3: 2013

 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013

 

1. FCC Standard Compliance:

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

1. Video Compression Technology

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

1. Mechanical Standards:

EN 60529:1991+A1:2004+A2:2013 - IP66 dust/water Ingress protection rating

EN 62262:2002 – IK-10 impact rating

1. Networking Standard:

 IEEE 802.3af-2003 PoE Standard, Class 3

 IPv4, 802.1x

1. Country of Origin

 FTC “Made in USA” standard compliant

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



## Part 2 Products

**2.1 Manufacturer**

**Arecont Vision, LLC**

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**2.2 General**

The AV20375RS SurroundVideo® Omni G3 series network camera is a dual encoder (H.264 & MJPEG), 20 Megapixel resolution, Omni-Directional Day/Night IP camera, designed to provide an all-in-one solution with four integrated 5-Megapixel sensors, four 3.3-6.6mm IR corrected lenses, remote setup platform, IK-10 vandal resistant dome and housing, rated IP66 for water and dust protection, to use camera for indoor and outdoor applications. The remote setup platform provides the operator can quickly zoom, focus and position the camera remotely, eliminating the need to adjust the camera on-site.

The AV20375RS is a PoE (IEEE 802.3af) compliant Day/Night camera, privacy masking, extended motion detection and flexible cropping.

Binning technique improves low-light performance, increases sensitivity and produces better SNR by combining and averaging pixels. The AV20375RS includes SNAPstream™ (Smart Noise Adaptation and Processing) technology to reduce bandwidth without impacting image quality.

This camera offers over ten times the resolution of standard-resolution IP cameras with the ability to output full real time frame rates.

**2.3 Hardware**

* The camera shall utilize four high sensitivity 5-Megapixel CMOS sensors with 1/2.5” optical format, 2.2um x 2.2um pixel size, progressive scan and Active Pixel Count: 2560(H) x 1920(V) pixel array
* The camera shall have an integrated 3.3-6.6mm megapixel, IR corrected, varifocal focal lens with 1/2.5" optical format, F/1.7 and horizontal field-of-view of 102°- 53°.
* The camera shall have an integrated remote setup platform which offers remotely configurable zoom, focus, pan, and tilt.
* The camera shall have four individually adjustable motorized 2-axis camera gimbals with 360˚ pan and 135˚ tilt for easy and accurate positioning.
* 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’s power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard and provide at least 12 Watts of power.

**2.4 Imaging**

* The camera shall combine four image sensors for a user configurable field of view.
* The camera shall support three predefined camera preset configurations: 180 degree, 270 degree, and 360 degree.
* The camera shall support two custom preset configurations.
* 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, and programmable shutter speed control to minimize motion blur, low light noise filter, control programmable resolution, brightness, saturation, gamma, tint and sharpness with a selectable enhancement level.
* The camera shall feature selectable 50/60 Hz flicker control 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 70.1 dB and a maximum SNR of 45 dB
* The camera shall have unlimited privacy masking, the ability to select multiple regions of an arbitrary shape to block the video.
* The camera shall provide 21 levels of compression quality for optimal viewing and archiving.
* 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 flexible cropping with any resolution multiple of 2 for H.264, any image width multiple of 64 for JPEG full resolution, any image width multiple of 128 for JPEG half resolution (no restriction on image height for JPEG).
* The camera shall be able to save bandwidth & storage by running at 1/4 full resolution, allows for bit rate and bandwidth limitation control.
* The camera shall feature MoonLight™ mode - extended exposure and noise cancellation.
* The camera’s shutter speed shall be 1ms - 166ms.
* The camera allows for +/- 5° Digital Vertical Alignment of sensor to adjust images.
* 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 has SNAPstream™ (Smart Noise Adaptation and Processing) technology to reduce bandwidth without impacting image quality.

**2.5 Video**

Video frame rate (up to):

7FPS @ 10240x1920

10FPS @ 5120x960

Video frame rate in binning mode up to:

 24 FPS @ 5120x960

**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, 802.1x, and IPv4.
* 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 1 input and 1 output

Power over Ethernet (PoE): PoE 802.3af

Auxiliary Power 12-24VDC, 24VAC

Power consumption: PoE – Class 3; auxiliary- 12W 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)

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

Humidity 0% to 90% (non-condensing)

**2.10 Illumination**

Color (Day Mode): 0.3 Lux

B/W (Night Mode): 0.03 Lux, IR sensitive

**2.11 Packaging**

Unit Dimensions (H x Dia) 4.9”H (125 mm) x 8.8” dia. (223 mm) Weight: 5.2lbs (2.36kg)

Packaged Dimensions (H x W x L) 7.4” (188mm) x 11.1” (281mm) x 11.1” (281mm) Weight: 5.9lbs (2.68kg)

**2.12 Compatible Accessories**

AV-WMJB Wall Mount w/ Junction Box

AV-PMJB Pendant Mount w/ Junction Box

AV-CRMA Corner Mount Adapter

AV-PMA Pole Mount Adapter

AV-JBA Junction Box

AV-EBAS Electrical Box Adapter Square

AV-EBAR Electrical Box Adapter Round

SO3-FMA Flush Mount Adapter

SO3-CAP Mount Cap

**2.13 Related Documents**

SurroundVideo® OmniG3 Datasheet

SurroundVideo® OmniG3 Installation Manual

**2.14 Warranty**

Limited 3-Year Parts and Labor

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



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