MegaDome® G3 RS IP Megapixel Cameras

1080p, 3, and 5 Megapixel (MP) H.264 All-in-One Remote Setup True Day/Night Indoor/Outdoor Dome IP Cameras with SNAPstream™ (Smart Noise Adaptation and Processing) and Enhanced WDR™ (Wide Dynamic Range) Models

MegaDome® G3 RS third generation megapixel cameras provide ample resolution to zoom-in for details in live or recorded video. With an IR corrected motorized lens and gimbals, MegaDome G3 RS is easy to install and manage with “no-touch” remote setup. Install the magnetic mounting plate, connect the PoE (Power-over-Ethernet) IP cable, magnetically snap in place and fasten the camera to the mounting plate, and then remotely configure the camera. Use the intuitive interface to remotely pan, tilt, zoom, and focus the sensor.

These indoor/outdoor all-in-one solutions integrate a 1080p, 3, or 5-megapixel (MP) sensor with fast frame rates, and SNAPstream™ (Smart Noise Adaptation and Processing) technology to reduce bandwidth without impacting image quality. The True Day/Night mechanical IR cut filter provides the highest image quality at any time of day. Select 1080p and 3MP models of MegaDome G3 RS include Enhanced WDR™ wide dynamic range, delivering up to 100dB at full resolution for applications with bright or over saturated lighting conditions. All models feature CorridorView™ for 90° image rotation, non-integer scaling, and an SDHC memory card slot for internal storage. The installer-friendly housing is IP66 rated for both indoor and outdoor applications and the cast-aluminum housing is IK-10 impact resistant, capable of withstanding the equivalent of 55 kg (120 lbs) of force.

The camera is integrated with the industry’s leading VMS/NVR platforms. Using the camera interface or the configuration utility, security updates and both new or enhanced features can be applied to the cyber-hardened MegaDome G3 RS’s Massively Parallel Image Processing (MPIP) architecture. This in house developed architecture runs on the Field Programmable Gate Array (FPGA) integrated circuit that is at the core of every AV Costar™ camera. The MegaDome G3 RS is ONVIF (Open Network Video Interface Forum) Profile S compliant, providing interoperability between network video products regardless of manufacturer.

Series Features

- 1080p, 3, or 5MP Models
- Remote Setup – No Touch Setup with a Varifocal Motorized Lens that can be Remotely Setup in Any Position
- Remote Focus/Zoom Capable
- Motorized Pan and Tilt Capable – Pan 359°, Tilt 90°
- SNAPstream™ Capability to Reduce Bandwidth without Impacting Image Quality
- Enhanced WDR™ up to 100dB at Full Resolution: See Clearly in Shaded and Bright Light Conditions Simultaneously on Select 1080p and 3MP Models
- Casino Mode™ Maintains 30fps or Higher Required by Gaming Industry Regulations (Select 1080p Models)
- True Day/Night Functionality with Mechanical IR Cut Filter
- Binning Mode for Strong Low Light Performance on 3MP and 5MP Cameras
- CorridorView™ Allows 90° Image Rotation for Better Coverage in Hallways and Corridors
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting, Forensic Zooming, and Non-Integer Scaling
- Dual Encoder H.264/MJPEG
- SDHC Card Slot for Onboard Storage
- Network Protocols Include HTTPS, 802.1x, DHCP, and More
- Total PoE Solution (No External Power Required for Heater), PoE and Auxiliary Power: 12–48V DC/24V AC
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing

Made in the USA  |  +1.818.937.0700  |  www.avcostar.com  |  avsales@arecontvision.com
### Camera Imaging Specifications

**Model**

<table>
<thead>
<tr>
<th>Model</th>
<th>AV2355RS</th>
<th>AV2356RS</th>
<th>AV3355RS</th>
<th>AV3356RS</th>
<th>AV5355RS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Sensor (CMOS)</td>
<td>1080p (2.1MP)</td>
<td>1080p (2.1MP)*</td>
<td>3MP</td>
<td>3MP</td>
<td>5MP</td>
</tr>
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</table>

**Day/Night**

True Day/Night with Automatic Removable IR Cut Filter

**Optical Format**

- 1/3"
- 1/3.2"
- 1/3"
- 1/3.2"
- 1/2.5"

**Pixel Pitch**

- 2.2μm
- 2.2μm
- 2.2μm
- 2.2μm
- 2.2μm

**Minimum Illumination**

- Color (Day Mode): 0.2 Lux
- Color (Night Mode): 0.02 Lux, IR sensitive

**B/W (Night Mode)**

- 0.02 Lux, IR sensitive
- 0.02 Lux, IR sensitive
- 0.02 Lux, IR sensitive
- 0.02 Lux, IR sensitive
- 0.03 Lux, IR sensitive

**Full FOV Resolution**

- 1920 H x 1080 V
- 1024 H x 768 V
- 1280 H x 960 V

**1/4 Resolution**

- 960 H x 540 V
- 1024 H x 768 V
- 1280 H x 960 V

**Scaling**

Yes

**Dynamic Range**

- 69.5dB
- WDR up to 100dB
- 69.5dB
- WDR up to 100dB
- 70.1dB

**Maximum SNR**

- 45dB
- 49dB
- 45dB
- 49dB
- 45dB

**Frame Rates**

- At Max Resolution: 30fps (1920 x 1080)
- Cropped: 30fps (1280 x 1024)
- Binning Mode: –

**Lens**

Wide Angle Motorized

2.8–6mm, 1/2.7”, F2.0, RF, Z, H-FOV = 88°–42°

2.8–6mm, 1/2.7”, F2.0, RF, Z, H-FOV = 88°–42°

2.8–6mm, 1/2.7”, F2.0, RF, Z, H-FOV = 94°–45°

2.8–6mm, 1/2.7”, F2.0, RF, Z, H-FOV = 94°–45°

2.8–6mm, 1/2.5”, F1.7, RF, Z, H-FOV = 102°–53°

**Optics**

Remote focus, remote zoom

**Low Light Performance**

- Pixel Binning Mode

**Programmable Shutter Speed**

Controls motion blur, 1ms–500ms

**Motion Detection**

Real-time, 1024 detection zones

**Privacy Masking**

Unlimited

**Scaling**

Non-integer scaling down to 128x96

**Casino Mode**

Maintains 30fps or higher (AV2355RS model)

**Flexible Cropping**

Resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264

**Backlight Compensation**

Multi-matrix white balance

**Flicker Control**

5Hz–255Hz adjustable

**Image Rotation**

CorridorView™ (90°, 180° and 270° image rotation)

**Wide Dynamic Range**

Auto adjustment between WDR and LDR modes (WDR models only)

**Efficiency**

SNAPstream™ (Smart Noise Adaptation and Processing)

**Sharpness**

Selectable enhancement level

**Miscellaneous**

Programmable resolution, brightness, saturation, gamma, tint

Electronic pan, tilt, zoom (PTZ)

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**All scaled resolutions are available on all cameras that support scaling**

**Effective**

**Maximum with H.264 compression**
Data Transmission

Compression Type | H.264 (MPEG-4, Part 10) / Motion JPEG
Network Protocols | HTTP, HTTPS, IPv4, 802.1x, RTSP, RTP/TCP, RTP/UDP, TFTP, DHCP
Network Interface | 100Base-T Ethernet
Multi-Streaming | 8 non-identical streams

Mechanical

Casing | Die-cast aluminum chassis with 4" polycarbonate dome bubble
       | IP66 weather proof standard
       | Impact resistant, IK-10 rated
Gimbal | 359° pan, 90° tilt
Dimensions (See Dimensions)
       | Unit: Ø 5.77" (146.7mm) x 5" H (128mm)
       | Packaged: 6" H (150mm) x 7.5" W (190mm) x 8" L (200mm)
Weight
       | Unit: 2.25lbs (1.02kg)
       | Packaged: 2.8lbs (1.27kg)
On Board Storage | SDHC slot up to 32GB (card not included)

Dimensions

Environmental

Operating Temperature | -40°C (-40°F) to +50°C (122°F)
                      | With motor operation: -10°C (14°F) to +50°C (122°F)
Humidity | 0% to 90% (non-condensing)
Storage Temperature | -40°C (-40°F) to +60°C (140°F)

Electrical

Alarm Input/Output | General purpose opto-coupled, 1 input/1 output
Power Over Ethernet | PoE 802.3af, Class 3
Auxiliary Power | 12~48V DC, 24V AC

Heater Electrical

Power Consumption | 2.28W max
Switch On/Off | On: 4°C (32.9°F), Off: 6.5°C (43.7°F)
Power Over Ethernet | Total PoE solution (no external power requirement)

Max Power Consumption (Watts DC power)

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<td>AV5355RS</td>
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Compliance

Industry Standard | ONVIF Profile S conformant
Listings | UL (CB)
FCC Compliance | 47 CFR 15 Class A
Environmental | RoHS, REACH, WEEE
Markings | CE: EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1
Networking Standard | IEEE 802.3af-2003 PoE Standard, Class 3
Mechanical | IK-10 (EN62262), IP66 (EN60529)
CoO | Made in the USA

Network Protocols

HT TP, HTTPS, IPv4, 802.1x, RTSP, RTP/TCP, RTP/UDP, TFTP, DHCP

Networking Standard

IEEE 802.3af-2003 PoE Standard, Class 3

RoHS, REACH, WEEE

Markings CE: EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1

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See Next Page for Ordering Information

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MegaDome® G3 RS IP Megapixel Cameras Specifications
Model Specific Features

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<tr>
<th>Model</th>
<th>Resolution</th>
<th>Frame Rate</th>
<th>Features</th>
</tr>
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<tbody>
<tr>
<td>AV2355</td>
<td>1080p</td>
<td>30fps</td>
<td>-</td>
</tr>
<tr>
<td>AV2356</td>
<td>1080p</td>
<td>30fps</td>
<td>WDR -</td>
</tr>
<tr>
<td>AV3355</td>
<td>3MP</td>
<td>21fps</td>
<td>- Binning</td>
</tr>
<tr>
<td>AV3356</td>
<td>3MP</td>
<td>21fps</td>
<td>WDR - Binning</td>
</tr>
<tr>
<td>AV5355</td>
<td>5MP</td>
<td>14fps</td>
<td>- Binning</td>
</tr>
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</table>

† Maximum with H.264 compression

Accessories (Sold Separately)

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Description</th>
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<tbody>
<tr>
<td>AV-CRMA</td>
<td>Corner Mount Adapter</td>
</tr>
<tr>
<td>AV-FMA</td>
<td>Flush Mount Adapter</td>
</tr>
<tr>
<td>AV-JBA†</td>
<td>Standard Junction Box</td>
</tr>
<tr>
<td>AV-PMA</td>
<td>Pole Mount Adapter</td>
</tr>
<tr>
<td>AV-PMJB</td>
<td>Pendant Mount Bracket with Standard Junction Box (Fits Cap 1.5” NPT, Box Fits 3/4” NPT)</td>
</tr>
<tr>
<td>AV-WMJB</td>
<td>Wall Mount Bracket with Standard Junction Box (Fits Cap 1.5” NPT, Box Fits 3/4” NPT)</td>
</tr>
<tr>
<td>MD-2HK</td>
<td>Heater Kit</td>
</tr>
<tr>
<td>MD-CAP</td>
<td>Mounting Cap for MegaDome® Series and SurroundVideo® G5 Mini</td>
</tr>
<tr>
<td>MD-JBA</td>
<td>Round Junction Box for MegaDome Series and SurroundVideo G5 Mini</td>
</tr>
</tbody>
</table>

† Replacement part for AV-PMJB and AV-WMJB

Configurations

1080p or 3MP Model

5MP Model

Create Your Model

(Example: AV5355RS)

<table>
<thead>
<tr>
<th>Megapixel Resolution</th>
<th>Generation</th>
<th>Body Type</th>
<th>Compression</th>
<th>Lens</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV</td>
<td>2</td>
<td>3</td>
<td>H.264</td>
<td>RS</td>
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<tr>
<td></td>
<td>3</td>
<td>5</td>
<td>H.264 + WDR</td>
<td></td>
</tr>
</tbody>
</table>

† “5” represents MegaDome G3 product line

WDR for AV2356 and AV3356 models only