MegaDome® G3 IP Megapixel Cameras

1.2, 1080p, 3, 5, and 10 Megapixel (MP) H.264 All-in-One Motorized P-Iris Lens True Day/Night Indoor/Outdoor Dome IP Cameras with SNAPstream™ (Smart Noise Adaptation and Processing), WDR (Wide Dynamic Range), STELLAR™ (Spatio Temporal Low Light Architecture), and IR LED Models

MegaDome® G3 third generation multi-megapixel cameras provide ample resolution to zoom-in for details in live or recorded video. These indoor/outdoor all-in-one solutions integrate a 1.2, 1080p, 3, 5 or 10-megapixel (MP) sensor with fast frame rates, and SNAPstream™ (Smart Noise Adaptation and Processing) technology to reduce bandwidth without impacting image quality. Together with an IR corrected motorized, P-iris wide angle or telephoto varifocal lens, remote focus and remote zoom make MegaDome G3 easy to install and manage. The installer-friendly housing is IP66 environmental rated and IK-10 impact-resistant. MegaDome G3 is feature-loaded, and select models include STELLAR™ (Spatio Temporal Low Light Architecture) for best-in-class light sensitivity capturing details in near complete darkness, or wide dynamic range (WDR) for applications with bright or over saturated lighting conditions.

Series Features

- 1.2, 1080p, 3, 5, and 10MP Models
- Remote Focus/Zoom Motorized, P-Iris Lens
- SNAPstream™ Capability to Reduce Bandwidth without Impacting Image Quality
- P-Iris Control to Get Best Depth of Field and Image Clarity
- Wide Angle or Telephoto Lens Options
- STELLAR™ (Spatio Temporal Low Light Architecture) Reduces Motion Blur, Noise and Storage Requirements, While Enhancing Contrast and Allowing Color Imaging in Near Complete Darkness on 1.2MP Models
- Optional True WDR up to 100dB at Full Resolution Available on Select 1080p and 3MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously
- True Day/Night Functionality with Mechanical IR Cut Filter and Optional IR LEDs
- Binning Mode for Strong Low Light Performance on 3MP, 5MP and 10MP Cameras
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations on Select 1080p Models
- 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
- Heater and Optional Audio and IR LEDs (No Heater Required for WDR and STELLAR Models)
- SDHC Card Slot for Onboard Storage (-S Models)
- Network Protocols Include HTTPS, 802.11x, DHCP, and More
- Total PoE Solution (No External Power Required for Heater and IR LEDs), PoE and Auxiliary Power: 12–48V DC/24V AC
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Easily Adjustable 3-Axis Gimbal

‡ HTTPS is for “-S” models only and cannot be used with STELLAR™ or audio functionality

Made in the USA

+1.818.937.0700  |  www.arecontvision.com  |  avsales@arecontvision.com

Onvif
Camera Specifications

Model | AV1355 | AV2355 | AV2356 | AV3355 | AV3356 | AV5355 | AV10355
---|---|---|---|---|---|---|---
Image Sensor (CMOS) | 1.2MP* | 1080p | 1080p** | 3MP* | 3MP | 5MP | 10MP
Day/Night | True Day/Night with Automatic Removable IR Cut Filter
Optical Format | 1/3” | 1/3” | 1/3.2” | 1/3” | 1/3.2” | 1/2.5” | 1/2.3”
Pixel Pitch | 3.75μm | 2.2μm | 2.2μm | 2.2μm | 2.2μm | 1.67μm | 2.2μm
Minimum Illumination | 0.02 Lux (Day Mode) | 0.2 Lux (Day Mode) | 0.2 Lux (Day Mode) | 0.2 Lux (Day Mode) | 0.2 Lux (Day Mode) | 0.3 Lux (Day Mode) | 0.42 Lux (Day Mode)
Color Binning (Day Mode) | – | – | – | 0.1 Lux | 0.1 Lux | 0.15 Lux | 0.21 Lux
B/W (Night Mode) | 0.002 Lux, IR sensitive | 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 | 0.04 Lux, IR sensitive
Full FOV Resolution | 1280 x 960 V | 1920 x 1080 V | 1920 x 1080 V | 2048 x 1536 V | 2048 x 1536 V | 2592 x 1944 V | 3648 x 2736 V
1/4 Resolution | 640 x 480 V | 960 x 540 V | 960 x 540 V | 1024 x 768 V | 1024 x 768 V | 1296 x 972 V | 1920 x 1373 V
Scaling | – | – | – | 1/4 Resolution | 640 H x 480 V | 960 H x 540 V | 960 H x 540 V
Dynamic Range | 83.5dB | 69.5dB | 69.5dB | 70.1dB | 87.2dB | –
Maximum SNR | 54dB | 45dB | 45dB | 49dB | 49dB | 45dB | 40dB
Frame Rates† | 37fps (1280 x 960) | 30fps (1920 x 1080) | 30fps (1920 x 1080) | 21fps (2048 x 1536) | 21fps (2048 x 1536) | 14fps (2592 x 1944) | 7fps (3648 x 2732)
Cropped | – | 30fps (1280 x 1024) | 30fps (1280 x 1024) | 21fps (2048 x 1536) | 21fps (2048 x 1536) | 14fps (2592 x 1944) | 7fps (3648 x 2732)
Binning Mode | – | – | – | 21fps (1024 x 768) | 21fps (1024 x 768) | 21fps (640 x 512) | 21fps (640 x 512)
Lens | Wide Angle Motorized (PMTIR-S Models) | 3–9mm, 1/2.7”, F1.2, RZ, RF, P-iris, H-FOV = 101°–32° | 2.8–8mm, 1/2.7”, F1.2, RZ, RF, P-iris, H-FOV = 86°–32° | 2.8–8mm, 1/2.7”, F1.2, RZ, RF, P-iris, H-FOV = 86°–32° | 2.8–8mm, 1/2.7”, F1.2, RZ, RF, P-iris, H-FOV = 104°–39° | 3–8mm, 1/2.5”, F1.4, RZ, RF, P-iris, H-FOV = 89°–47° | 4–8mm, 1/2.3”, F1.6, RZ, RF, P-iris, H-FOV = 89°–47°
Telephoto Motorized (PM/PMIR-S Models) | – | 8–22mm, 1/2.7”, F1.6, RZ, RF, P-iris, Telephoto, H-FOV = 30°–12° | 8–22mm, 1/2.7”, F1.6, RZ, RF, P-iris, Telephoto, H-FOV = 30°–12° | 8–22mm, 1/2.7”, F1.6, RZ, RF, P-iris, Telephoto, H-FOV = 32°–12° | 9–22mm, 1/2.5”, F2.0, RZ, RF, P-iris, Telephoto, H-FOV = 38°–16° | 12–22mm, 1/2.3”, F2.0, RZ, RF, P-iris, Telephoto, H-FOV = 30°–17°

Scaling Resolution Chart***

<table>
<thead>
<tr>
<th>Model</th>
<th>Horizontal</th>
<th>Vertical</th>
<th>Pixel Count</th>
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<tbody>
<tr>
<td>720p</td>
<td>1280</td>
<td>720</td>
<td>921600</td>
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<tr>
<td>XVG</td>
<td>1024</td>
<td>768</td>
<td>786432</td>
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<tr>
<td>DVG (16:9)</td>
<td>1136</td>
<td>640</td>
<td>727040</td>
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<tr>
<td>DVG (3:2)</td>
<td>960</td>
<td>640</td>
<td>614400</td>
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<tr>
<td>SVGA</td>
<td>800</td>
<td>600</td>
<td>480000</td>
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<tr>
<td>D1 (PAL)</td>
<td>720</td>
<td>576</td>
<td>414720</td>
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<tr>
<td>4CIF (PAL)</td>
<td>704</td>
<td>576</td>
<td>405504</td>
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<tr>
<td>D1 (NTSC)</td>
<td>720</td>
<td>480</td>
<td>345600</td>
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<tr>
<td>4CIF (NTSC)</td>
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<td>337920</td>
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<tr>
<td>VGA</td>
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<td>480</td>
<td>307200</td>
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<td>2CIF (PAL)</td>
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<tr>
<td>2CIF (NTSC)</td>
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<td>360</td>
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<td>4CIF (NTSC)</td>
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<td>168960</td>
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<td>HVG (8:3)</td>
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<td>240</td>
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<tr>
<td>HVG (3:2)</td>
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<td>320</td>
<td>153600</td>
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<tr>
<td>HVG (16:9)</td>
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<td>CIF (PAL)</td>
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<td>QVGA (8IF)</td>
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<tr>
<td>SQCIF</td>
<td>128</td>
<td>96</td>
<td>12288</td>
</tr>
</tbody>
</table>

* STELLAR™ Model  ** Effective

Programmability

- **Optics**
  - Remote focus, remote zoom, P-iris
- **Low Light Performance**
  - Pixel Binning Mode
  - 3, 5 and 10MP models
- **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 (-S models)
- **Casino Mode™**
  - Maintains 30fps or higher (AV2355 models)
- **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, 50/60Hz (-S models)
- **Image Rotation**
  - CorridorView™ (90°, 180° and 270° image rotation)
- **Wide Dynamic Range**
  - Auto adjustment between WDR and LDR modes (WDR models only)
- **Noise Reduction**
  - Low light noise filter control
- **Efficiency**
  - SNAPstream™ (Smart Noise Adaptation and Processing)
  - Bit rate and bandwidth limitation control
- **Sharpness**
  - Selectable enhancement level
- **Miscellaneous**
  - Programmable resolution, brightness, saturation, gamma, tilt
  - Electronic pan, tilt, zoom (PTZ)

Specifications

Made in the USA

+1.818.937.0700  |  www.arecontvision.com  |  avsales@arecontvision.com
Mechanical

Casing
Die-cast aluminum chassis with 4" polycarbonate dome bubble
IP66 weather proof standard
Impact resistant, IK-10 rated

Gimbal
Easily adjustable 3-axis camera gimbal w/ 360° pan, 77° tilt and 180° z-axis

Dimensions
(See Dimensions)

<table>
<thead>
<tr>
<th>Unit</th>
<th>Ø 5.77&quot; (146.7mm) x 5&quot; H (128mm)</th>
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</thead>
<tbody>
<tr>
<td>Packaged</td>
<td>6&quot; H (150mm) x 7.5&quot; W (190mm) x 8&quot; L (200mm)</td>
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</tbody>
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Weight

<table>
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<tr>
<th>Unit</th>
<th>2.25 lbs (1.02 kg)</th>
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</thead>
<tbody>
<tr>
<td>Packaged</td>
<td>2.8 lbs (1.27 kg)</td>
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On Board Storage
SDHC slot up to 32GB (Card not included)

IR Illuminator (IR models only)

<table>
<thead>
<tr>
<th>PMIR</th>
<th>12 pcs 850nm LEDs / 50ft (15m) IR distance (max) / 60° and 80° IR angle</th>
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</thead>
<tbody>
<tr>
<td>PMTIR</td>
<td>12 pcs 850nm LEDs / 120ft (36m) IR distance (max) / 40° IR angle</td>
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Power Over Ethernet
Total PoE solution (No external power requirement)

Audio Electrical (-A and -AH models only)

<table>
<thead>
<tr>
<th>Streaming</th>
<th>Two-way</th>
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<tbody>
<tr>
<td>Compression</td>
<td>G.711 PCM 8 kHz</td>
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<tr>
<td>Input/Output</td>
<td>Microphone in or line in / line output</td>
</tr>
</tbody>
</table>

Heater Electrical (-H and -AH models only)

| Power Consumption | 2.28 W max |
| Switch | On: 4°C (32.9°F), Off: 6.5°C (43.7°F) |

Power Over Ethernet
Total PoE solution (No external power requirement)

Mechanical

Casing
Die-cast aluminum chassis with 4" polycarbonate dome bubble
IP66 weather proof standard
Impact resistant, IK-10 rated

Gimbal
Easily adjustable 3-axis camera gimbal w/360° pan, 77° tilt and 180° z-axis

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On Board Storage
SDHC slot up to 32GB (Card not included)

Compliance

Industry Standard
ONVIF Profile S conformant

Listings
UL (CB)

FCC Compliance
47 CFR 15 Class A

Environmental
RoHS, REACH, WEEE

Networking Standard
IEEE 802.3af-2003 PoE Standard, Class 3, IPv4, 802.1x

Mechanical
IK-10 (EN62262), IP66 (EN60529)
CoO
Made in the USA

Environmental

Operating temperature
-40°C (-40°F) to +50°C (122°F) w/ Heater or WDR/STELLAR™ Models w/o Heater

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

Max Power Consumption (Watts DC power)

<table>
<thead>
<tr>
<th>Model</th>
<th>AV1355</th>
<th>AV2355</th>
<th>AV2356</th>
<th>AV3355</th>
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<td>PM</td>
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<td>PM-H</td>
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<td>PMIR-SH</td>
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<td>14.2</td>
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<td>PMIR-SH</td>
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<td>13.8</td>
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</table>

‡ HTTPS is for "-S" models only and cannot be used with STELLAR™ or audio functionality

Made in the USA

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Ordering Information

Model Specific Features

<table>
<thead>
<tr>
<th>Model</th>
<th>Resolution</th>
<th>Frame Rate</th>
<th>Features</th>
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<td>1.2MP</td>
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<td>21fps</td>
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<td>AV3356</td>
<td>3MP</td>
<td>21fps</td>
<td>WDR</td>
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<td>AV10355</td>
<td>10MP</td>
<td>7fps</td>
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Configurations

- Motorized Lens with IR LEDs
- Motorized Lens

Options

- PM: Wide Angle Lens w/ Remote Focus/Zoom, P-Iris, True Day/Night
- PMT: Telephoto Lens w/ Remote Focus/Zoom, P-Iris, True Day/Night
- IR: IR LEDs
- -S: SDHC Card Slot, Non-Integer Scaling, HTTPS†
- -A: Audio
- -H: Heater (Non-WDR and Non-STELLAR™ Models Only)

Note: Not all options available on all models.

Create Your Model

(Example: AV10355PMTIR-SH)

<table>
<thead>
<tr>
<th>Megapixel Resolution</th>
<th>Generation</th>
<th>Body Type</th>
<th>Compression</th>
<th>Lens</th>
<th>Infrared</th>
<th>Onboard Storage</th>
<th>Audio</th>
<th>Heater</th>
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<tr>
<td>AV</td>
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<td>5</td>
<td>6</td>
<td>PM</td>
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<td>A</td>
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</table>

**Model Numbers**

1.2MP
- AV1355PM-S
- AV1355PMIR-S

1080p
- AV2355PM-H
- AV2355PMIR-SA
- AV2355PMIR-SH
- AV2355PMTIR-SH
- AV2356PM
- AV2356PMIR-S
- AV2356PMIR-SA
- AV2356PMTIR-S

3MP
- AV3355PM-H
- AV3355PMIR-SA
- AV3355PMIR-SH
- AV3356PM
- AV3356PMIR-S
- AV3356PMIR-SA
- AV3356PMTIR-S

5MP
- AV5355PM-H
- AV5355PMIR-SA
- AV5355PMIR-SH
- AV5356PM
- AV5356PMIR-S
- AV5356PMIR-SA
- AV5356PMTIR-S

10MP
- AV10355PMIR-SH
- AV10355PMTIR-SH

**Specifications**

- 1.2MP represents MegaDome G3 product line
- WDR for AV2356 and AV3356 models only
- Maximum with H.264 compression
- HTTPS is for “-S” models only and cannot be used with STELLAR™ or audio functionality
- "5" represents MegaDome G3 product line

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