Arecont Vision

10 Years 2003 - 2013

Celebrating 10 Years of Leading the Way in Megapixel Video

# SurroundVideo®

## 180° and 360° Coverage in an All-in-One Vandal Resistant Dome

**SurroundVideo® Cameras**

| 8MP Panoramic 180° | 8MP Panoramic 360° | 20MP Panoramic 180° | 20MP Panoramic 360° | 40MP Panoramic 180° |
|---|---|---|---|---|
| AV8185CO | AV8365CO | AV20185CO | AV20365CO | AV40185DN |
| AV8185CO-HB | AV8365CO-HB | AV20185CO-HB | AV 20365CO-HB | AV40185DN-HB |
| AV8185DN | AV8365DN | AV20185DN | AV20365DN | |
| AV8185DN-HB | AV8365DN-HB | AV20185DN-HB | AV20365DN-HB | |

180° Panoramic

360° Panoramic

SurroundVideo® panoramic view megapixel IP cameras provide all-in-one solutions for wide area video surveillance. Four sensors and lenses are housed in a vandal-resistant IP66 dome enclosure. The cameras are available in 180° and 360° configurations and resolutions of 8-, 20- and 40-megapixels (MP). A single SurroundVideo® panoramic camera can replace multiple conventional cameras with the ability to zoom into multiple regions of interest. Their return on investment is easily measured any way you view it.

**180° Panoramic at 8, 20 and 40MP**

**360° Panoramic at 8 and 20MP**

**Dual Encoder H.264/MJPEG**

**True Day/Night**

**Pixel Binning for Superior Low Light Performance (20 and 40MP)**

**All-in-One Dome Solution with Integrated Lens**

**Vandal and Weather Proof IK-10 and IP66 Rated**

## Features:

- Industry's First 8MP, 20MP and 40MP Panoramic Megapixel Cameras
- Dual Encoder H.264/MJPEG
- Indoor/Outdoor IP66, Vandal Resistant and IK-10 Rated Dome
- Binning Mode to Increase Sensitivity (20MP and 40MP)
- Reduced Overall System Cost
- Easily Adjustable 2-Axis Camera Gimbal with 360° Pan and 90° Tilt
- +/- 5 ° Electrical Vertical Alignment to Locate Each Sensor Position (180° Series)
- +/- 10° Mechanical Tilt Adjustment to Locate Each Sensor Angle (360° Series)
- Bit Rate Control, Privacy Mask and Multi-Streaming
- Forensic Zooming
- PoE and Auxiliary Power: 12–48V DC/24V AC
- Complete Mounting Options

### Model Specific Features

| | | | | |
|---|---|---|---|---|
| **AV8185** | 8MP | 180° | 6fps | |
| **AV8365** | 8MP | 360° | 6fps | |
| **AV20185** | 20MP | 180° | 3.5fps | Binning |
| **AV20365** | 20MP | 360° | 3.5fps | Binning |
| **AV40185** | 40MP | 180° | 1.5fps | Binning |

### Build-to-Order Options

| | |
|---|---|
| **CO** | Color |
| **DN** | Day/Night |
| **-HB** | Heater & Blower |

ONVIF

## Camera Imaging Specifications

| Model | | AV8185 | AV8365 | AV20185 | AV20365 | AV40185 |
|---|---|---|---|---|---|---|
| Image Sensor (CMOS) | | 8MP = 2MP x 4 | 8MP = 2MP x 4 | 20MP = 5MP x 4 | 20MP = 5MP x 4 | 40MP = 10MP x 4 |
| H-FOV | | 180° | 360° | 180° | 360° | 180° |
| Optical Format | | 1/2" | 1/2" | 1/2.5" | 1/2.5" | 1/2.3" |
| Pixel Pitch | | 4.2µm | 4.2µm | 2.2µm | 2.2µm | 1.67µm |
| Minimum Illumination | Color | 0.1 Lux | 0.1 Lux | 0.3 Lux | 0.3 Lux | 0.42 Lux |
| | Color Binning | - | - | 0.15 Lux | 0.15 Lux | 0.21 Lux |
| | Day/Night (-DN Version) | 0 Lux, IR sensitive | 0 Lux, IR sensitive | 0 Lux, IR sensitive | 0 Lux, IR sensitive | 0 Lux, IR sensitive |
| Full FOV Resolution | Total | 6400 H x 1200 V | 6400 H x 1200 V | 10240 H x 1920 V | 10240 H x 1920 V | 14592 H x 2752 V |
| | Per Sensor | 1600 H x 1200 V | 1600 H x 1200 V | 2560 H x 1920 V | 2560 H x 1920 V | 3648 H x 2752 V |
| 1/4 Resolution | Total | 3200 H x 600 V | 3200 H x 600 V | 5120 H x 960 V | 5120 H x 960 V | 7296 H x 1376 V |
| | Per Sensor | 800 H x 600 V | 800 H x 600 V | 1280 H x 960 V | 1280 H x 960 V | 1824 H x 1376 V |
| Dynamic Range | | 61dB | 61dB | 70.1dB | 70.1dB | 57.2dB |
| Frame Rates | Full Resolution | 6fps (6400x1200) | 6fps (6400x1200) | 3.5fps (10240x1920)<br>4.2fps (10240x1600) | 3.5fps (10240x1920)<br>4.2fps (10240x1600) | 1.5fps (14592x2752) |
| | 1/4 Resolution | - | - | 11fps (5120x960) | 11fps (5120x960) | 5.5fps (7296x1376) |
| | Binning Mode | - | - | 13fps (5120x960) | 13fps (5120x960) | 6.5fps (7296x1376) |
| Lens | | CS, F1.8, 7.8mm, IR, H-FOV = 47° | CS, F1.8, 3.5mm, IR, H-FOV = 96° | CS, F1.8, 6.2mm, H-FOV = 47° | CS, F1.8, 3.5mm, H-FOV = 96° | CS, F2.4, 7.2mm, H-FOV = 47° |

### Data Transmission

| | |
|---|---|
| Compression Type | H.264 (MPEG-4, Part 10)/Motion JPEG |
| | 21 levels of quality |
| Network Protocols | RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP |
| Network Interface | 100Base-T Ethernet |
| Multi-Streaming | Non-identical streams (2 per sensor) |

### Programmability

- On-camera real-time motion detection and privacy mask with up to 1024 detection zones (per sensor)
- Privacy mask
- Pixel Binning Mode (20 and 40MP)
- +/-5° Digital Vertical Alignment to adjust images
- Flexible Cropping (resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264)
- Low light noise filter control
- Bit rate and bandwidth limitation control
- Backlight compensation and auto multi-matrix white balance
- 50/60Hz selectable flicker control
- Electronic pan, tilt, zoom (PTZ) and image flip 180°
- Programmable resolution, brightness, saturation, gamma, sharpness, tint
- Bandwidth and storage savings by running at 1/4 resolution
- Simultaneous delivery of full field-of-view and zoomed images
- Programmable shutter speed to help control motion blur

### Compliance

| | |
|---|---|
| Industry Standard | ONVIF 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 |
| Mechanical | IK-10 (EN62262), IP66 (EN60529) |

### Electrical

| | | |
|---|---|---|
| Input/Output | General purpose opto-coupled | |
| Power Over Ethernet | PoE 802.3af, Class 3 | |
| Auxiliary Power | 12–48V DC, 24V AC | |
| Power Consumption | AV8185/AV8365 | 9 Watts DC Power |
| | AV20185/AV20365 | 9 Watts DC Power |
| | AV40185 | 11.7 Watts DC Power |

### Heater & Blower Electrical
(-HB only)

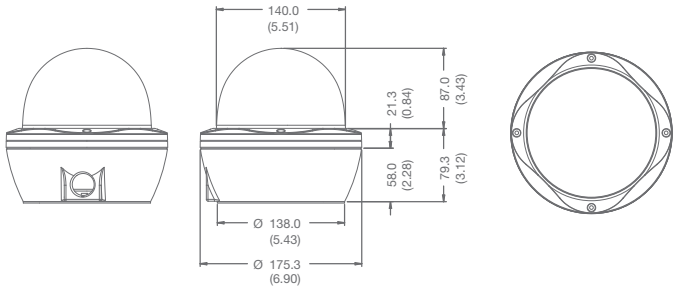
| | |
|---|---|
| Voltage Input | 12V to 20V DC/24V AC (separate power required) |
| Power Output | 11W Max (DC 12V); 13W Max (AC 24V) |
| Heater Switch | On: 17°C (62.6°F), Off: 30°C (86°F) |
| Blower Switch | On: 10°C (50°F), Off: 15°C (59°F) |
| | On: 50°C (122°F), Off: 45°C (113°F) |

### Environmental

| | |
|---|---|
| Operating temperature | -40°C (-40°F) to +50°C (122°F) w/Heater |
| Humidity | 0% to 90% (non-condensing) |
| Stable image temperature | 0°C (32°F) to +50°C (122°F) |
| Storage temperature | -30°C (-22°F) to +60°C (140°F) |

### Mechanical

| | | |
|---|---|---|
| Casing | Die-cast aluminum chassis with 5.5" (140mm) polycarbonate dome bubble | |
| | IP66 weather proof standard | |
| | Vandal resistant, IK-10 rated | |
| Gimbal | Easily adjustable, 2-axis w/360° pan and 90° tilt | |
| Total Unit Dimensions | Unit | Ø6.9" (175mm) x 6.55" H (166mm) |
| | Bubble Only | Ø5.5" (140mm) x 3.4" H (87mm) |
| | Packaged | 8.5" (215mm) x 8.5" (215mm) x 8.5" (215mm) |
| Weight | Unit | 3.81 lbs (1.75kg) |
| | Packaged | 4.63 lbs (2.1kg) |




### Accessories

| | |
|---|---|
| MD-PMA | Pole Mount Adapter |
| MD-CRMA | Corner Mount Adapter |
| SV-CMT | Ceiling Mount (Fit 1.5" NPT) |
| SV-EBA | Electrical Box Adapter |
| SV-FMA | Flush Mount Adapter |
| SV-JBA | Junction Box Adapter (Fit 3/4" NPT Conduit) |
| SV-WMT | Wall Mount (Fit 1.5" NPT) |

Made in the USA

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