Contera® Omni LX Megapixel Camera

8 or 20 Megapixel (MP) H.265/H.264 All-in-One Remote Setup Omni-Directional User-Configurable Multi-Sensor True Day/Night Indoor/Outdoor Dome IP Cameras with SNAPstream+™ (Smart Noise Adaptation and Processing), WDR (Wide Dynamic Range), and NightView™ Models

The ConteraIP Omni LX multi-sensor, multi-megapixel camera was built to withstand evolving customer change-requirements. The unique, future-proof platform of the ConteraIP Omni LX provides organizations of all sizes the flexibility to deploy a security system that truly matches their video surveillance needs now; and again if requirements change in the future. With its ground-breaking flexibility such as the ability to easily move each of the four sensors around the magnetic 70+ placement-point Omni track, the 3-axis gimbals for an increased range of motion when positioning the sensors, and the ability to interchange the remote focus modular lenses for a customized field of view, the ConteraIP Omni LX provides customers with the confidence in a future-proof investment. The ConteraIP Omni LX changes when you do.

ConteraIP Omni LX is available with a choice of 8- or 20-megapixel (MP) resolutions. These cameras provide an all-in-one solution for capturing wide area video surveillance while maximizing the field-of-view and reducing the total number of cameras required saving installers time and end users money.

ConteraIP Omni LX is ideal for applications with normal to challenging lighting conditions. The Omni combines a day/night mechanical IR cut filter for the highest image quality at any time of day. For clear color images in low-light, NightView offers strong low-light sensitivity for capturing details in extremely poor-lit scenes.

Power can be supplied via a single PoE+ (802.3at) compliant network cable or via an 12–48V DC/24V AC power supply.

ConteraIP Omni LX is designed for demanding environments. Certified to rigorous dust and water tests, the camera carries an IP66 rating. The rugged dome housing is IK-10 rated to withstand the equivalent of 55 kg (120 lbs) of force for vandal-prone applications.

AV Costar™ was the first to bring H.264 to the mainstream market and recently developed SNAPstream™ (Smart Noise Adaptation and Processing) technology for reducing bandwidth without impacting image quality. Today we are proud to offer our next generation H.265 with SNAPstream+ smart codec capable of delivering high quality video while saving over 50% of the data rate to reduce or prevent strain on the network.

The ConteraIP Omni LX is ONVIF (Open Network Video Interface Forum) Profile S, G, and T compliant, providing interoperability between network video products regardless of manufacturer.

Series Features

- 8MP and 20MP Models
- Remote Focus
- 3-Axis Gimbal – Up to 4 Individual Camera Gimbals can be Independently Placed in Any Orientation Around a 360° Track with Extra Positions for Locking Straight Down
- Multiple Lens Options in a Single Camera Housing
- SNAPstream+ Advanced Compression Algorithm Reduces Bandwidth without Impacting Image Quality
- NightView for Strong Low Light Performance
- True Day/Night Functionality with Mechanical IR Cut Filter
- On-Screen Display (OSD)
- WDR at Full Resolution: See Clearly in Shaded and Bright Light Conditions Simultaneously

- Privacy Mask, Motion Detection, Bit Rate Control, Multi-Streaming, and Multicasting
- Triple Encoder: H.265/H.264/MJPEG
- Network Protocols Include SNMP, HTTPS, IPv6, DHCP, 802.1x, and More
- All-in-One H.265/H.264 Total PoE+ Solution PoE+ and Auxiliary Power: 12V-48V DC/24V AC
- MicroSDXC Card Slot for Onboard Storage
- Ultra Discrete, Low-Profile Housing
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
### Camera Imaging Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>AV8476DN</th>
<th>AV20476DN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Sensor (CMOS)</td>
<td>8MP (1080p x 4) CMOS Progressive Sensor</td>
<td>20MP (5MP x 4) CMOS Progressive Sensor</td>
</tr>
<tr>
<td>Optical Format</td>
<td>1/2.8&quot;</td>
<td>1/2.8&quot;</td>
</tr>
<tr>
<td>Pixel Pitch</td>
<td>2.9μm</td>
<td>2.0μm</td>
</tr>
<tr>
<td>Minimum Illumination</td>
<td>Color (Day Mode) 0.04 Lux, B/W (Night Mode) 0.004 Lux</td>
<td>Color (Day Mode) 0.10 Lux, B/W (Night Mode) 0.010 Lux</td>
</tr>
<tr>
<td>Full FOV Resolution</td>
<td>Total 7680 H x 1080 V Per Sensor 1920 H x 1080 V</td>
<td>Total 10368 H x 1944 V Per Sensor 2592 H x 1944 V</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>Up to 100dB*</td>
<td>Up to 100dB*</td>
</tr>
<tr>
<td>Frame Rates**</td>
<td>At Max Resolution 30fps (8MP), Multi-Stream Up to 30fps (8MP) + 20fps (8MP)</td>
<td>Up to 15fps (20MP) + 5fps (20MP)</td>
</tr>
<tr>
<td>Lens (x4)</td>
<td>2.8mm Lens Option (-28 Models)</td>
<td>2.8mm, 1/2.7&quot;, F2.0, H-FOV = 106.7°</td>
</tr>
</tbody>
</table>

### Programmability

- **Details:** M12 lens and remote focus module
- **Low-Light Performance:** NightView technology
- **Programmable Shutter Speed:** Auto/manual 0.1ms - 500ms
- **Motion Detection:** Real-time, 1024 detection zones
- **Privacy Masking:** Unlimited
- **Backlight Compensations:** Auto
- **White Balance Mode:** Auto/manual
- **Gain Control:** Auto
- **Flicker Control:** 5Hz-255Hz adjustable
- **Scaling (Per Sensor):**
  - **8MP:** 1920x1080, 1280x960, 1280x720, 960x540, 800x600, 640x480, 640x360
  - **20MP:** 2592x1944, 2560x1440, 2304x1296, 2048x1536, 1920x1080, 1600x1200, 1280x972, 1280x960, 800x600, 640x480
- **Wide Dynamic Range:** Adjustment between WDR and LDR modes
- **Efficiency:** SNAPstream+ (Smart Noise Adaptation and Processing) Bit rate and bandwidth limitation control
- **Miscellaneous:** Programmable brightness, contrast, sharpness, saturation, hue
- **Password:** 16-digit ASCII character password
- **On-Screen Display (OSD):** Time/date/camera name/custom text

### Data Transmission

- **Compression Type:** H.265/H.264 (MPEG-4, Part 10)/Motion JPEG
- **Bit Rate Control:** 64K-8000K
- **Smart Codec:** Smart GOP/Smart ROI
- **Network Protocols:** SNMP, HTTP, HTTPS, IPv6, IPv4, SSL, TCP/IP, UPnP, UDP, RTCP, RTSP, RTP, SMTP, NTP, DHCP, FTP, T.802.1x, QoS, DNS, Zero Configure
- **Network Interface:** 10/100/1000Mbps Ethernet, RJ45
- **Max Camera Bandwidth:** 40Mbps (10Mbps per sensor)
- **Multi-Streaming:** 2 x H.265/H.264 stream, 1 x M-JPEG stream (per sensor)
- **Users:** Live Viewing/Administrator for up to 10 clients

### Event Management

- **Event Trigger:** Motion detection, tampering detection, alarm in
- **Notifications:** Send a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4

### Compliance

- **Industry Standard:** ONVIF Profile S, G, and T conformant
- **Listings:** UL60950-1, E489591
- **FCC Compliance:** 47 CFR 15 Class A
- **Environmental:** RoHS, REACH, WEEE
- **Markings:** CE: EN55032 Class A, EN55035, EN61000-3-2, EN61000-3-3
- **Mechanical:** IK-10 (EN62262), IP66 (EN65029)

### Environmental

- **Operating Temperature:** -40°C (-40°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:** 1 input (wet contact)/1 output (wet contact)
- **Power Over Ethernet:** IEEE 802.3at (PoE+)
- **Auxiliary Power:** 12-48V DC, 24V AC
- **Power Consumption:** 15W max

### Audio Electrical

- **Streaming:** Two-way
- **Compression:** G.711 PCM 8 kHz
- **Input/Output:** Line in/***/Line output

---

* Maximum with digital WDR
** Maximum with H.264 compression
*** Requires Amplification
Contera IP® Omni LX Megapixel Cameras Specifications

### Mechanical

<table>
<thead>
<tr>
<th>Casing</th>
<th>Die-cast aluminum chassis with polycarbonate dome bubble</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IP66 weather proof standard</td>
</tr>
<tr>
<td></td>
<td>Impact resistant, IK-10 rated</td>
</tr>
<tr>
<td>Gimbal</td>
<td>Easily adjustable, 3-axis w/360° pan, 90° tilt, and 360° z-axis</td>
</tr>
</tbody>
</table>

### Dimensions (See Dimensions)

- **Unit**
  - Ø 7.7" (196mm) x 3.1" H (78.5mm)
- **Bubble Only**
  - Ø 6.7" (169.2mm) x 1.3" H (33.4mm)
- **Packaged**
  - 8" W (203mm) x 8" L (203mm) x 4" H (102mm)

### Weight

- **Unit**
  - 3.8lbs (1.7kg)
- **Packaged**
  - 4.4lbs (2.0kg)

### On Board Storage

- MicroSDXC slot up to 256GB (card not included)

### Body Color

- AV Costar White (Pantone® Cool Gray 1C)

---

**Dimensions**

- 7.7" (196 mm)
- 3.1" (78.5 mm)
- 6.7" (169.2 mm)
- 3.1" (78.5 mm)

**Min. Hole Size**

- 1.89" (48 mm)

**Body Color**

- AV Costar White (Pantone® Cool Gray 1C)

---

**See Next Page for Ordering Information**

+1.818.937.0700 | www.avcostar.com | avsales@arecontvision.com
Contera IP® Omni LX Megapixel Cameras

Ordering Information

Model Numbers

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>8MP</td>
<td>AV8476DN-28</td>
</tr>
<tr>
<td></td>
<td>AV8476DN-NL</td>
</tr>
<tr>
<td>20MP</td>
<td>AV20476DN-28</td>
</tr>
<tr>
<td></td>
<td>AV20476DN-NL</td>
</tr>
</tbody>
</table>

Lens Options (Sold Separately)

<table>
<thead>
<tr>
<th>Model</th>
<th>Focal Length</th>
<th>Horizontal Field of View</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1080p</td>
</tr>
<tr>
<td>MPM2.4</td>
<td>2.4mm</td>
<td>135°</td>
</tr>
<tr>
<td>MPM2.8C</td>
<td>2.8mm</td>
<td>106.7°</td>
</tr>
<tr>
<td>MPM4.0A</td>
<td>4mm</td>
<td>74.7°</td>
</tr>
<tr>
<td>MPM6.0</td>
<td>6mm</td>
<td>49.8°</td>
</tr>
<tr>
<td>MPM8.0</td>
<td>8mm</td>
<td>37.3°</td>
</tr>
<tr>
<td>MPM12.0A</td>
<td>12mm</td>
<td>24.9°</td>
</tr>
<tr>
<td>MPM16.0</td>
<td>16mm</td>
<td>18.7°</td>
</tr>
</tbody>
</table>

1 MPM2.8C (2.8mm) is the default lens for -28 models
2 Requires two spacers on focus module (included with lens)
3 Requires a spacer on focus module (included with lens)

Accessories (Sold Separately)

<table>
<thead>
<tr>
<th>Accessories</th>
<th>Description</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV-1AK</td>
<td>ConteraIP Optional Audio Kit</td>
<td>AV Costar White</td>
</tr>
<tr>
<td>AV-CRMA-W</td>
<td>Corner Mount Adapter (AV Costar White)</td>
<td>AV Costar White</td>
</tr>
<tr>
<td>AV-JBA-W</td>
<td>Standard Junction Box (AV Costar White)</td>
<td>AV Costar White</td>
</tr>
<tr>
<td>AV-PMA-W</td>
<td>Pole Mount Adapter (AV Costar White)</td>
<td>AV Costar White</td>
</tr>
<tr>
<td>AV-PMJB-W</td>
<td>Pendant Mount Bracket with Standard Junction Box (AV Costar White) (Fits Cap 1.5” NPT, Box Fits 3/4” NPT)</td>
<td>AV Costar White</td>
</tr>
<tr>
<td>AV-WMJB-W</td>
<td>Wall Mount Bracket with Standard Junction Box (AV Costar White) (Fits Cap 1.5” NPT, Box Fits 3/4” NPT)</td>
<td>AV Costar White</td>
</tr>
<tr>
<td>SO-CAP-W</td>
<td>Cap for ConteraIP Omni LX (AV Costar White)</td>
<td>AV Costar White</td>
</tr>
<tr>
<td>SO-FMA</td>
<td>Flush Mount Adapter for ConteraIP Omni LX (White)</td>
<td>AV Costar White</td>
</tr>
</tbody>
</table>

Create Your Model (Example: AV20476DN-28)

<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></td>
<td>8</td>
<td>Omni Dome</td>
<td>H.265/H.264 + WDR</td>
<td>No Lens</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td></td>
<td></td>
<td>28mm</td>
</tr>
</tbody>
</table>

© 2020 Arecont Vision Costar, LLC. All rights reserved. Arecont Vision, Contera, and ConteraIP are registered trademarks of the company. AV Costar, the AV Costar logo, NightView, SNAPstream and SNAPstream+ are business use trademarks of the company.