

ConteralP® Omni LX Megapixel Camera

20 Megapixel (MP) H.265/H.264 All-in-One Remote Focus 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™

H.265



The ConteralP Omni LX multi-sensor, multi-megapixel camera was built to withstand evolving customer change-requirements. The unique, future-proof platform of the ConteralP 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 ConteralP Omni LX provides customers with the confidence in a future-proof investment. The ConteralP Omni LX changes when you do.

ConteralP Omni LX is available with a 20-megapixel (MP) resolution. 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.

ConteralP 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.

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



Interchangeable Lenses with Remote Focus Module



SNAPstream+™ Technology



Omni-Directional Track with 4 Customizable Sensors



270° FOV Capable



Wide Dynamic Range



True Day/Night with IR Cut Filter



NightView™



Ultra Low Profile Design



3-Axis Gimbal



Impact / Weather Resistant IK-10 and IP66 Rated



Tri-Encoder H.265/H.264/MJPEG

Series Features

- 20MP (4x 5MP Sensors)
- 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 Looking 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
- NDAA and TAA Compliant

Camera Imaging Specifications

Model		AV20576DN
Image Sensor (CMOS)		20MP (5MP x 4) CMOS Progressive Sensor
Optical Format		1/2.8"
Pixel Pitch		2.0µm
Minimum Illumination	Color (Day Mode)	0.15 Lux
	B/W (Night Mode)	0.15 Lux
Full FOV Resolution	Total	10368 H x 1944 V
	Per Sensor	2592 H x 1944 V
Dynamic Range		Up to 100dB*
Frame Rates**	At Max Resolution	15fps (20MP)
	Multi-Stream	Up to 15fps (20MP) + 10fps (20MP) + 15fps (1.2MP)
Lens (x4)		2.8mm, 1/2.7", F1.6, H-FOV = 98°

Programmability

Optics	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 Compensation	Auto
White Balance Mode	Auto/manual
Gain Control	Auto
Flicker Control	5Hz-255Hz adjustable
Scaling <small>(Per Sensor)</small>	20MP 2592x1944, 2560x1440, 2304x1296, 2048x1536, 1920x1080, 1600x1200, 1296x972, 1280x960, 1280x720, 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
	21 levels of quality
Bit Rate Control	128K-8000K
Smart Codec	Smart GOP
Network Protocols	SNMP, HTTP, HTTPS, IPv6, IPv4, SSL, TCP/IP, UPnP, UDP, RTCP, RTSP, RTP, SMTP, NTP, DHCP, FTP, 802.1x, QoS, DDNS, Zero Config
Network Interface	10/100/1000Mbps Ethernet, RJ45
Max Camera Bandwidth	36Mbps (9Mbps 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 (EN60529)

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+), Class 4
Auxiliary Power	12-48V DC, 24V AC
Power Consumption	14W max

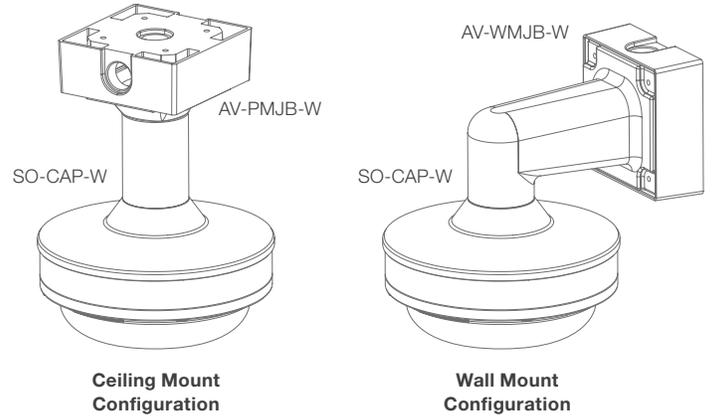
Audio Electrical

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

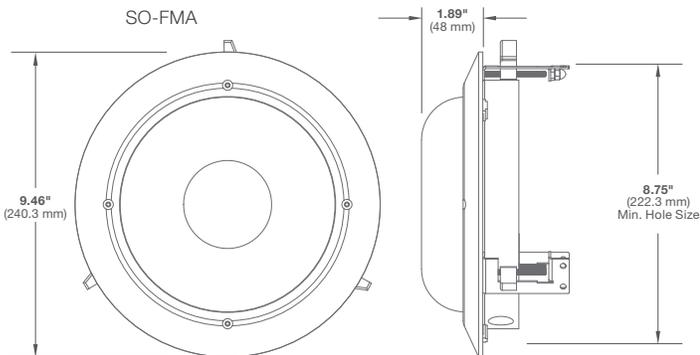
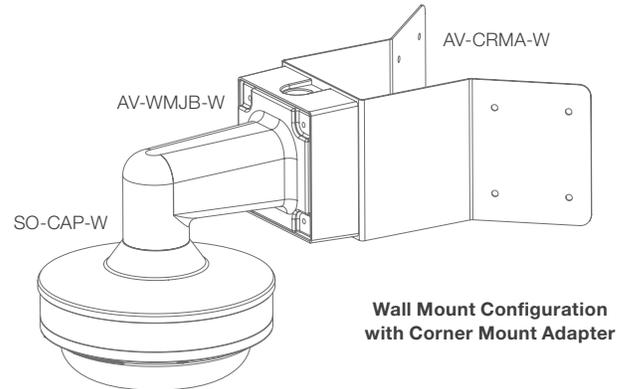
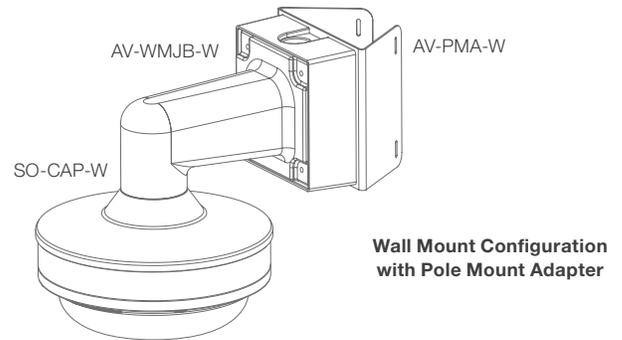
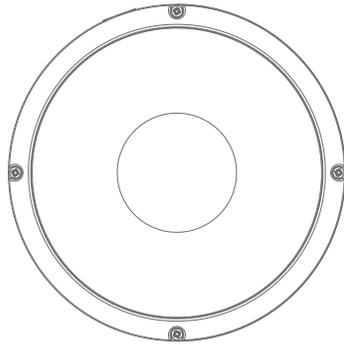
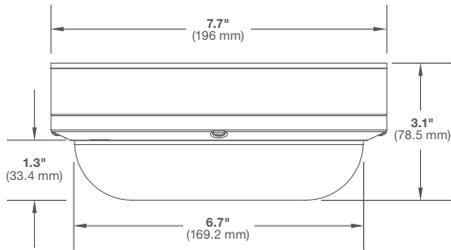
* Maximum with digital WDR
 ** Maximum with H.264 compression
 *** Requires Amplification

Mechanical

Casing	Die-cast aluminum chassis with polycarbonate dome bubble	
	IP66 weather proof standard	
	Impact resistant, IK-10 rated	
Gimbal	Easily adjustable, 3-axis w/360° pan, 90° tilt, and 360° z-axis	
Dimensions <i>(See Dimensions)</i>	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 1TB (card not included)	
Body Color	AV Costar White (Pantone® Cool Gray 1C)	



Dimensions



Flush Mount Adapter

See Next Page for Ordering Information



Configurations



Omni LX

Model Numbers

20MP	AV20576DN-28	WDR
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Lens Options (Sold Separately)

Model	Focal Length	Horizontal Field of View	
		1080p	5MP
MPM2.4	2.4mm	135°	126°
MPM2.8C ¹	2.8mm	106.7°	98°
MPM4.0A ²	4mm	74.7°	68.6°
MPM6.0 ²	6mm	49.8°	45.7°
MPM8.0 ²	8mm	37.3°	34.3°
MPM12.0A ^{2,4}	12mm	24.9°	22.9°
MPM16.0 ^{3,4}	16mm	18.7°	17.2°

- 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)
- ⁴ Requires the use of the SO-BUBBLE (Not Included)

Accessories (Sold Separately)

AV-1AK	ConteraIP Optional Audio Kit
AV-CRMA-W	Corner Mount Adapter (AV Costar White)
AV-JBA-W	Standard Junction Box (AV Costar White)
AV-PMA-W	Pole Mount Adapter (AV Costar White)
AV-PMJB-W	Pendant Mount Bracket with Standard Junction Box (AV Costar White) (Fits Cap 1.5" NPT, Box Fits 3/4" NPT)
AV-WMJB-W	Wall Mount Bracket with Standard Junction Box (AV Costar White) (Fits Cap 1.5" NPT, Box Fits 3/4" NPT)
SO-BUBBLE	Bubble with Gasket, Clear, Flat Bottom for Lenses above 8mm
SO-CAP-W	Cap for ConteraIP Omni LX (AV Costar White)
SO-FMA	Flush Mount Adapter for ConteraIP Omni LX (White)

Create Your Model (Example: AV20576DN-28)

	Megapixel Resolution	Generation	Body Type	Compression	True Day/Night	Lens
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