

# Contera™ Panoramic IP Megapixel Cameras

8 or 20 Megapixel (MP) H.265/H.264 All-in-One 180° Panoramic True Day/Night Indoor/Outdoor Dome IP Camera with SNAPstream+™ (Smart Noise Adaptation and Processing), Enhanced WDR™ (Wide Dynamic Range), NightView™, and IR LEDs

H.265



Contera™ Panoramic megapixel IP cameras provide an all-in-one solution for wide-area video surveillance. Four sensors and lenses are housed in an outdoor-rated IP66 and IK-10 impact-resistant dome enclosure. The cameras are available in a 180° configuration and resolutions of 8- and 20-megapixel (MP). A single Contera 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.

Regardless of the time of day, the Contera Panoramic is prepared for any lighting condition. For applications with poor lighting conditions, Enhanced WDR™ (wide dynamic range) at 120dB provides the best visual balance to shaded and bright light conditions.

For clear color images in low-light, NightView™ offers strong low-light sensitivity

for capturing details in extremely poor-lit scenes, which is further enhanced by LED illumination built into each sensor gimbal.

Arecont Vision® 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 camera's power can be supplied via a Power-over-Ethernet (PoE - IEEE 802.3af) compliant network cable connection.

The Contera Panoramic is ONVIF (Open Network Video Interface Forum) Profile S compliant, providing interoperability between network video products regardless of manufacturer.



180° Panoramic



SNAPstream+™  
Technology



NightView™



Enhanced WDR™  
Wide Dynamic Range



IR LEDs



True Day/Night  
with Mechanical  
IR Cut Filter



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



Impact / Weather  
Resistant IK-10  
and IP66 Rated



All-in-One PoE  
and Integrated Lens

## Series Features

- 8MP or 20MP Resolution
- SNAPstream+™ Capability to Reduce Bandwidth without Impacting Image Quality
- NightView™ for Strong Low Light Performance
- True Day/Night Functionality with Mechanical IR Cut Filter
- Enhanced WDR™ up to 120dB at Full Resolution: See Clearly in Shaded and Bright Light Conditions Simultaneously
- Forensic Zooming – Zoom Live or After the Event While Recording Full Field-of-View in HD – Replace PTZ Devices
- Privacy Mask, Motion Detection, Bit Rate Control, Multi-Streaming, Multicasting, and Scaling
- On-Screen Display (OSD)
- Defog Technology
- 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 (No External Power Required for Heater and IR LEDs) PoE and Auxiliary Power: 12V DC/24V AC
- IR Illumination on All Four Sensors
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Easily Adjustable 2-Axis Camera Gimbal with 355° Pan and 90° Tilt
- Electrical Vertical and Horizontal Alignment to Locate Each Sensor Position

Camera Specifications

Model		AV08CPD-118	AV20CPD-118
Image Sensor		8MP (1080p x 4) CMOS Progressive Sensor	20MP (5MP x 4) CMOS Progressive Sensor
Optical Format		1/2.8"	1/2.9"
Minimum Illumination	Color (Day Mode)	0.05 Lux	0.1 Lux
	B/W (Night Mode)	0.005 Lux	0.01 Lux
Full FOV Resolution	Total	7680 H x 1080 V	10368 H x 1944 V
	Per Sensor	1920 H x 1080 V	2592 H x 1944 V
Scaling (See Scaling Resolutions Below)		Yes	Yes
IR Illumination		Yes	Yes
Dynamic Range		120dB	120dB
Frame Rates*	At Max Resolution	Up to 30fps (8MP)	Up to 30fps (20MP)**
	Multi-Stream	Up to 30fps (8MP) + 20fps (8MP)	Up to 15fps (20MP)** + 15fps (20MP)**
		Up to 30fps (8MP) + 30fps (3.7MP) + 30fps (1.2MP)	Up to 20fps (8MP)** + 30fps (3.7MP)** + 30fps (1.2MP)**
Lens		M12, F2.0, 6.0mm, IR, H-FOV = 180°, V-FOV = 30°	M12, F2.2, 4.0mm, IR, H-FOV = 180°, V-FOV = 30°

Programmability

Optics	Fixed lens	
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*	50/60Hz selectable	
Scaling (Per Sensor)	8MP	1920x1080, 1280x720, 960x540, 640x480, 640x360, 320x240
	20MP	2592x1944, 2048x1536, 1920x1080, 1296x972, 1280x720, 640x480, 640x360, 320x240
Wide Dynamic Range	Adjustment between WDR and LDR modes	
Efficiency	SNAPstream+™ (Smart Noise Adaptation and Processing)	
	Bit rate and bandwidth limitation control	
Defog	Supported	
Digital Image Alignment	8MP	+/- 6° vertical and +/- 9° horizontal
	20MP	+/- 2° vertical and +/- 4° horizontal
Miscellaneous	Programmable brightness, contrast, sharpness, saturation, hue	
	Electronic pan, tilt, zoom (PTZ)	
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	64K-8000K
Smart Codec	Smart GOP/Smart ROI
Transmission Protocols	SNMP, HTTP, HTTPS, IPv6, IPv4, SSL, TCP/IP, UPnP, UDP, RTCP, RTSP, RTP, SMTP, NTP, DHCP, FTP, 802.1x, Zero Configure
Network Interface	10/100/1000Mbps Ethernet, RJ45
Max Camera Bandwidth	30Mbps
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/record message via e-mail/FTP/NAS, record JPG/mp4

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
Mechanical	IK-10 (EN62262), IP66 (EN60529)

Environmental

Operating Temperature	-20°C (-4°F) to +50°C (122°F)
Humidity	0% to 90% (non-condensing)
Storage Temperature	-40°C (-40°F) to +60°C (140°F)

\* 30 frames per second (FPS) maximum with H.264 and H.265 compression at 60 hertz (Hz), up to 25fps maximum at 50Hz

\*\* Max FPS with Enhanced WDR™ turned on will be up to 50% of listed FPS

## IR Illuminator

<b>LEDs</b>	8pcs
<b>Projection Distance</b>	100ft (30m) max

## General Electrical

<b>Alarm Input/Output</b>	1 input (dry contact)/1 output (relay)	
<b>Power Over Ethernet</b>	IEEE 802.3at (PoE+)	
	Total PoE solution (no external power requirement)	
<b>Auxiliary Power</b>	12V DC, 24V AC	
<b>Power Consumption</b>	<b>8MP</b>	21W PoE max
	<b>20MP</b>	24W PoE max

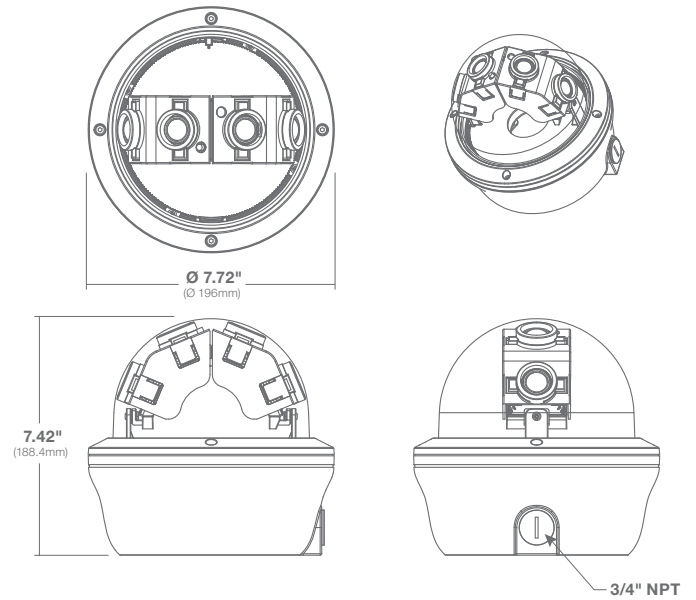
## Audio Electrical

<b>Streaming</b>	Two-way
<b>Compression</b>	G.711 PCM 8 kHz
<b>Input/Output</b>	Line output

## Mechanical

<b>Casing</b>	Die-cast aluminum chassis with 6.2" (157mm) polycarbonate dome bubble	
	IP66 weather proof standard	
	Impact resistant, IK-10 rated	
<b>Gimbal</b>	Easily adjustable, 2-axis w/355° pan and 90° tilt	
<b>Dimensions</b> <i>(See Dimensions)</i>	<b>Unit</b>	Ø 7.72" (196mm) x 7.42" H (188.4mm)
	<b>Bubble Only</b>	Ø 6.18" (157mm) x 4.15" H (105.5mm)
	<b>Packaged</b>	9.2" H (234mm) x 9.1" W (230mm) x 9.1" L (230mm)
<b>Weight</b>	<b>Unit</b>	5.51lbs (2.5kg)
	<b>Packaged</b>	6.17lbs (2.8kg)
<b>Body Color</b>	Arecont Vision® White (Pantone P179-1C)	

## Dimensions



See Next Page for Ordering Information



### Model Numbers

<b>8MP</b>	AV08CPD-118	WDR
<b>20MP</b>	AV20CPD-118	WDR

### Accessories (Sold Separately)

<b>AV-WMJB-W</b>	Wall Mount Bracket with Standard Junction Box (Arecont Vision® White) <i>(Fits Cap 1.5" NPT, Box Fits 3/4" NPT)</i>
<b>CP-CAP-W</b>	Mounting Cap for Contera™ Panoramic (Arecont Vision White)

### Configurations



180° Panoramic

Create Your Model (Example: AV08CPD-118)

Megapixel Resolution

Contera Product Line

Body Type

