

# ConteralP® Fisheye Megapixel Camera

12 Megapixel (MP) H.265/H.264 All-in-One 360° Panoramic True Day/Night Outdoor Dome IP Camera, WDR (Wide Dynamic Range), NightView™, IR LEDs, and Integrated Audio

H.265



The ConteralP® Fisheye megapixel camera features 12-megapixel (MP) resolution with an integrated ultra wide-angle lens for excellent, optimal image quality and optimum performance. The ConteralP Fisheye camera can replace multiple fixed or PTZ cameras by recording an entire 360° panoramic field of view, without blindspots, and the ability to zoom into multiple regions of interest for a return on investment that's easily measured.

Regardless of time-of-day, this camera is ideal for applications with challenging lighting conditions. The series combines a day/night mechanical IR cut filter for the highest image quality at any time of day. For applications with poor lighting conditions, WDR™ (wide dynamic range) at 100dB 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 integrated LED illumination.

AV Costar™ was the first to bring H.264 to the mainstream market. Today we are proud to offer our next generation H.265 capable of delivering high quality video while saving over 50% of the data rate to reduce or prevent strain on the network.

ConteralP Fisheye is designed for demanding environments. Certified to rigorous dust and water tests, the camera carries an IP67 rating. The rugged dome housing is IK-10 rated for vandal-prone applications.

The microSDXC card slot supports up to 1TB of storage capacity for convenient onboard storage. The camera's power can be supplied via a Power-over-Ethernet (PoE - IEEE 802.3at) compliant network cable connection or a 12V DC power supply.

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



Single Sensor  
360° Panoramic



NightView™



Wide Dynamic Range



Independently  
Configurable  
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



1TB Max Capacity  
MicroSDXC Card Slot



Audio  
Line In



Audio  
Line Out

## Series Features

- 12MP Resolution
- Full 360° Panoramic Image without Blind Spots
- NightView™ for Strong Low Light Performance
- True Day/Night Functionality with Mechanical IR Cut Filter
- WDR: See Clearly in Shaded and Bright Light Conditions Simultaneously
- Privacy Mask, Motion Detection, Bit Rate Control, Multi-Streaming, Multicasting, Forensic Zooming, and Scaling
- On-Screen Display (OSD)
- 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 DC
- Integrated IR Illumination with a Range of 50ft (15m) for Scenes with Low or No Ambient Light
- MicroSDXC Card Slot for Onboard Storage
- Outdoor Rated IP67 and IK-10 Impact-Resistant Housing
- Audio Line In / Line Out
- On board and remote dewarping. Onboard camera based, remote VMS based via AV Costar dewarp library
- Multiple On-Board Dewarping View Modes
- NDAA and TAA Compliant

## Camera Imaging Specifications

<b>Model</b>		<b>AV12CFE-250</b>
<b>Image Sensor</b>		12MP CMOS Progressive Sensor
<b>Optical Format</b>		1/1.7"
<b>Minimum Illumination</b>	Color (Day Mode)	0.3 Lux
	B/W (Night Mode)	0.09 Lux, IR sensitive
<b>Full FOV Resolution</b>		4000 H x 3000 V 12MP (2992 H x 2992 V 9MP effective)
<b>Scaling</b> (See Scaling Resolutions Below)		Yes
<b>IR Illumination</b>		Yes
<b>Dynamic Range</b>		100dB Digital WDR
<b>Frame Rates*</b>	Single Stream	Up to 30fps Max Resolution All Stream 1 Dewarp Modes H.265/H.264
	Dual Streams	Up to 15fps Max Resolution All Stream 1 Dewarp Modes H.265/H.264 + 15fps Max Resolution All Stream 2 Dewarp Modes H.265/H.264
<b>Lens</b>		1.97mm, F2.3, H-FOV 180°, V-FOV 180°

## Programmability

Optics		Fisheye Lens	
Low-Light Performance		NightView™ technology	
		IR Illuminators	
Programmable Shutter Speed		Auto/Manual, shutter time: 1 ~ 1/100000s	
Motion Detection		Up to 5 Areas	
Privacy Masking		Up to 5 Areas	
Backlight Compensation		Auto	
White Balance Mode		Auto/manual	
Gain Control		Auto	
Image Rotation		Horizontal and Vertical Mirror (Independent or Combined)	
Scaling	Stream 1	Ceiling Perspective Fisheye Overview: 2992x2992, 2048x2048, 1280x1280 PTZ: 2048x2048, 2048x1536, 1920x1080 Quad View: 3584x2688, 3584x2016, 2048x2048, 2048x1536, 1920x1080 Panorama: 4096x1024, 3584x1008, 2560x720 Double Panorama: 3584x2688, 3584x2016, 2560x1920, 2560x1440 Panorama PTZ: 3584x1344, 2560x960, 1920x720 Double Panorama PTZ: 3584x2688, 2560x1920, 1920x1440	
		Wall Perspective Fisheye Overview: 2992x2992, 2048x2048, 1280x1280 PTZ: 2048x2048, 2048x1536, 1920x1080 Panorama: 3584x1344, 3584x1008, 2560x960, 2560x720, 1920x1080 Double Panorama: 3584x2688, 3584x2016, 2560x1920, 2560x1440	
		Stream 2	Ceiling Perspective Fisheye Overview: 2992x2992, 2048x2048, 1280x1280, 960x960 PTZ: 2048x2048, 1920x1080, 1280x1280, 960x960 Quad View: 2560x1920, 2560x1440, 2048x2048, 2048x1536, 1920x1080, 960x960 Panorama: 2560x720, 2048x512 Double Panorama: 2560x1920, 2560x1440 Panorama PTZ: 2304x864, 1920x720, 1280x480 Double Panorama PTZ: 2048x1536, 1024x768
			Wall Perspective Fisheye Overview: 2992x2992, 2048x2048, 1280x1280, 960x960 PTZ: 2048x2048, 1920x1080, 1280x1280, 960x960 Panorama: 2560x960, 2560x720, 1920x1080, 960x540 Double Panorama: 2560x1920, 2560x1440
	Wide Dynamic Range		100dB Digital
	Miscellaneous		Color saturation, brightness, sharpness, contrast, white balance, day/night threshold, exposure control (including automatic gain control), hue, GOP length
	On-Screen Display (OSD)		Time / Date / Camera Name / Custom Text
Display/Dewarp Modes		Fisheye Overview, PTZ, Quad View, Panorama, Double Panorama, Panorama PTZ, Double Panorama PTZ	

## Data Transmission

<b>Compression Type</b>	H.265/H.264 (MPEG-4, Part 10)/Motion JPEG
<b>Bit Rate Control</b>	<b>Stream 1:</b> Variable 500-12000 Kbps; Max 500-11000 Kbps; Constant 500-11000 Kbps
	<b>Stream 2:</b> Variable 500-8000 Kbps; Max 500-7000 Kbps; Constant 500-7000 Kbps
<b>Transmission Protocols</b>	TCP/IP, UDP, ICMP, IPv4, IPv6, SNMP v2c/v3, QoS, HTTP, HTTPS, SSH, SSL, SMTP, FTP, RTSP, UPnP, DHCP, DNS, NTP, RTP, RTCP, DynDNS support, 802.1x
	10/100Base-TX Auto-adaptive Ethernet network interface, RJ45
<b>Multi-Streaming</b>	2 x H.265/H.264 stream, 1 x M-JPEG stream
<b>Users</b>	Live viewing/Administrator for up to 31 clients

## Event Management

<b>Event Trigger</b>	Motion Detection, Alarm Handler, Tampering Alarm, Network Failure
<b>Notifications</b>	Trigger Alarm Output, E-mail, SMTP, FTP, Record Video to SD Card and Network Storage

## Compliance

<b>Industry Standard</b>	ONVIF Profile S, G, T conformant
<b>Listings</b>	UL 62368-1, E489591
<b>FCC Compliance</b>	47 CFR FCC Part 15B Class A
<b>Environmental</b>	RoHS, WEEE
<b>Markings</b>	<b>CE:</b> EN55032, EN55035, EN61000-3-2, EN61000-3-3 Class A
<b>Mechanical</b>	IK-10 (IEC62262), IP67 (IEC60529)

## Environmental

<b>Operating Temperature</b>	-40°C (-40°F) to 55°C (131°F)
<b>Humidity</b>	0% to 90% (non-condensing)

## General Electrical

<b>Alarm Input/Output</b>	1 x input (wet contact)/1 x output (wet contact)
<b>Power Over Ethernet</b>	PoE IEEE 802.3at, Class 4
	Total PoE solution (no external power requirement)
<b>Auxiliary Power</b>	12VDC
<b>Power Consumption</b>	15W max

IR Illuminator

LEDs	6pcs, independently configurable
Projection Distance	50ft (15m) max

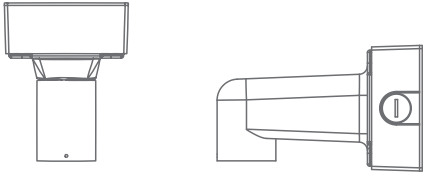
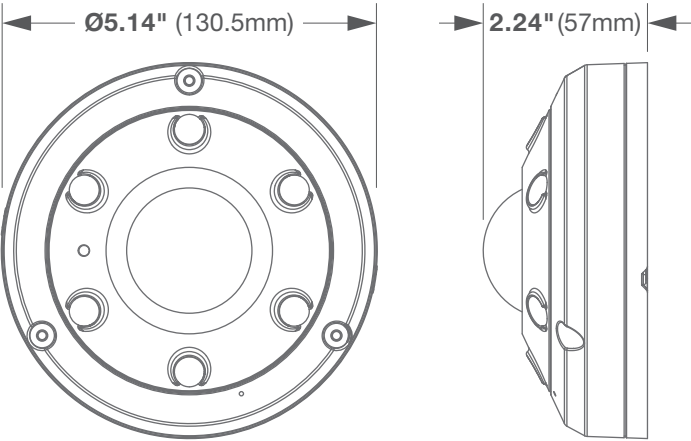
Audio Electrical

Streaming	Two-way
Compression	G.711 PCM 8 kHz/16 bits (A-Law/μ-Law)
Input/Output	Line Input* / Line Output

Mechanical

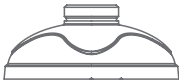
Casing	Die-cast aluminum chassis with polycarbonate dome bubble		
Mounting Options	Ceiling, Wall		
Dimensions <i>(See Dimensions)</i>	Unit	Ø5.14" (130.5mm) x 2.24" H (57mm)	
	Packaged	5.63" H (143mm) x 6.14" W (156mm) x 6.14" L (156mm)	
Weight	Unit	1.45lbs (0.657kg)	
	Packaged	1.92lbs (0.87kg)	
On Board Storage	MicroSDXC slot up to 1TB (card not included)		
Body Color	AV Costar White (Pantone® Cool Gray 1C)		

Dimensions



AV-PMJB-W

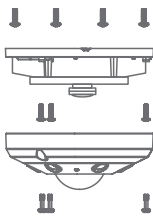
AV-WMJB-W



CLD-CAP-W



AV12CFE-ADPT



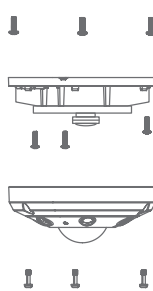
Ceiling and Wall Mount  
with Cap Options Assembly



CLD-JBA-W



AV12CFE-ADPT



Junction Box Assembly

\* Requires Amplification

See Next Page for Ordering Information



Model Numbers

12MP	AV12CFE-250	WDR
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Accessories

AV12CFE-ADPT	ConteraIP 2nd Gen Fisheye Mount Adapter (AV Costar White)
AV-CRMA-W	Corner Mount Adapter (AV Costar White)
AV-EBAPR	Electrical Box Adapter Plate (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)
CLD-CAP-W*	Mounting Cap for ConteraIP Outdoor Dome (AV Costar White)
CLD-JBA-W*	ConteraIP Outdoor Dome Round Junction Box (AV Costar White)

Configurations



Surface mount dome

Create Your Model (Example: AV12CFE-250)

	Megapixel Resolution	Contera Product Line	Body Type
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\* Requires AV12CFE-ADPT

