AV COSTAR™

ConteraIP® Fisheye Megapixel Camera

12 Megapixel (MP) H.265/H.264 All-in-One 360º Panoramic True Day/Night Outdoor Dome IP Camera with SNAPstream+™ (Smart Noise Adaptation and Processing), WDR (Wide Dynamic Range), NightView,™ IR LEDs, and Integrated Audio

H.265

The ConteraIP® Fisheye megapixel camera features 12-megapixel (MP) resolution for optimum performance. The ConteraIP Fisheye camera can replace multiple fixed or PTZ cameras by recording an entire 360º 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. The ConteraIP Fisheye combines a day/night mechanical IR cut filter with an integrated lens for excellent, optimal image quality.

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 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 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 microSDXC card slot supports up to 256GB of storage capacity for convenient onboard storage. The camera's power can be supplied via a Power-over-Ethernet (PoE - IEEE 802.3af) compliant network cable connection.

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

360° Single Sensor 360° Panoramic	SNAPstream+™ Technology	NightView™	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	SDXC Card Slot	Integrated Microphone and Speaker

Series Features

- 12MP Resolution
- Full 360º Panoramic Image without Blind Spots
- SNAPstream+™ Capability to Reduce Bandwidth without Impacting Image Quality
- 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
- Integrated Microphone and Speaker
- Privacy Mask, Motion Detection, Bit Rate Control, Multi-Streaming, Multicasting, Forensic Zooming, and Scaling
- Multiple On-Board Dewarping View Modes

- 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 PoE Solution
- Integrated IR Illumination with a Range of 33ft (10m) for Scenes with Low or No Ambient Light
- MicroSDXC Card Slot for Onboard Storage
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Built-in Dewarping When Used with ConteraVMS

Onvif | SGT

Camera Imaging Specifications

Model			AV12CPD-236
Image Sensor			12MP CMOS Progressive Sensor
Optical Format			1/1.7"
Minimum Illumination	Color (Day Mode)		0.05 Lux
	B/W (Night Mode)		0.005 Lux, IR sensitive
Full FOV Resolution			4000 H x 3000 V (2720 H x 2720 V effective)
Scaling *(See Scaling Resolutions Below)*			Yes
IR Illumination			Yes
Dynamic Range			70.7dB
Frame Rates*	Single Stream		Up to 15fps (12MP) / 25fps (6MP)
	Fisheye Mode	12MP Mode	Up to 15fps (12MP) + 15fps (3MP) + 15fps (720x576)
		9MP Mode	Up to 15fps (9MP) + 15fps (4MP) + 15fps (720x576)
		6MP Mode	Up to 25fps (6MP) + 25fps (4MP) + 25fps (720x576)
	4PTZ Mode	12MP Mode	Up to 15fps (3MP) + 15fps (1080P) + 15fps (1080P) + 15fps (1080P) + 15fps (1080P)
		9MP Mode	Up to 15fps (4MP) + 15fps (1080P) + 15fps (1080P) + 15fps (1080P) + 15fps (1080P)
		6MP Mode	Up to 25fps (4MP) + 15fps (1080P) + 15fps (1080P) + 15fps (1080P) + 15fps (1080P)
	Panorama Mode	12MP Mode	Up to 15fps (12MP) + 15fps (3MP)
		9MP Mode	Up to 15fps (6MP) + 15fps (4MP)
		6MP Mode	Up to 25fps (6MP) + 25fps (4MP)
Lens	Fisheye Lens		1.8mm, F2.4, H-FOV 176.8°

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 4 Areas
Privacy Masking	Up to 8 Areas
Backlight Compensation	Auto
White Balance Mode	Auto/manual
Gain Control	Auto
Flicker Control*	50/60Hz
Image Rotation	180°/ Flip Vertical/ Flip Horizontal
Scaling	4000x3000, 3000x3000, 3000x2000(Panorama), 2560x2560, 2000x2000, 3000x1500(Panorama),2000x1500, 720x576, 320x288
Wide Dynamic Range	70.7dB
Efficiency	SNAPstream+™ (Smart Noise Adaptation and Processing)
	Bit rate control
Defog	Supported
Miscellaneous	Programmable brightness, contrast, sharpness, saturation, red/ blue offset
	Supports 10 display modes
Password	32-digit character password
On-Screen Display (OSD)	Custom/ Date/ Time/ Serial Port/ ScrollOSD/ Picture Overlay/ Network Port
Basic Video Analytics	Audio Detection
	Motion Detection
	Camera Tamper
Display/Dewarp Modes	Fisheye, 4PTZ, Panorama

Data Transmission

Compression Type	H.265/H.264 (MPEG-4, Part 10)/Motion JPEG
Bit Rate Control	128~16384 Kbps
Smart Codec	Smart GOP/Smart ROI
Transmission Protocols	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, 802.1x, SNMP, QoS
	10/100Base-TX Auto-adaptive Ethernet network interface, RJ45
Multi-Streaming	2 x H.265/H.264 stream, 1 x M-JPEG stream
Users	Live viewing/Administrator for up to 31 clients

Event Management

Event Trigger	Motion Detection, Tampering Detection, Alarm In, Audio Detection
Notifications	Alarm Output, Recording, FTP, Trigger E-mail

Compliance

Industry Standard	ONVIF Profile S, G, T conformant
Listings	UL (CB) UL60950-1, E489591
FCC Compliance	47 CFR 15 Class A
Environmental	RoHS, WEEE
Markings	**CE:** EN55032 Class A, EN55024, EN61000-3-2, EN61000-3-3

Environmental

Operating Temperature	-35°C (-31°F) to +60°C (140°F)
Humidity	10% to 90% (non-condensing)
Storage Temperature	-40°C (-40°F) to +60°C (140°F)

General Electrical

Alarm Input/Output	2x input (wet contact)/1x output (wet contact)
Power Over Ethernet	PoE IEEE 802.3af, Class 0
	Total PoE solution (no external power requirement)
Auxiliary Power	12V DC
Power Consumption	9.6W PoE max
Serial Interface	1 channel RS485
Analog Video Output	1 BNC, impedance 75Ω; amplitude 1V [p-p]

IR Illuminator

LEDs	3pcs, Smart IR
Projection Distance	33ft (10m) max

Audio Electrical

Streaming	Two-way
Compression	G.711 PCM 8 kHz
Input/Output	Line In / Line Output / Built-in Mic / Built-in Speaker

Mechanical

Casing	Die-cast aluminum chassis with 1.7" polycarbonate dome bubble	
Mounting Options	Ceiling, Wall, Desktop	
Dimensions *(See Dimensions)*	Unit	Ø 5.87" (149mm) x 2.17" H (55mm)
	Packaged	6.9" H (170mm) x 6.9" W (170mm) x 4.1" L (105mm)
Weight	Unit	1.1lbs (0.5kg)
	Packaged	3.6 lbs (1.65kg)
On Board Storage	MicroSDXC slot up to 256GB (card not included)	
Body Color	White	

Dimensions

Ø 5.87" (149mm)

2.17" (55mm)

Ø 5.87" (149mm)
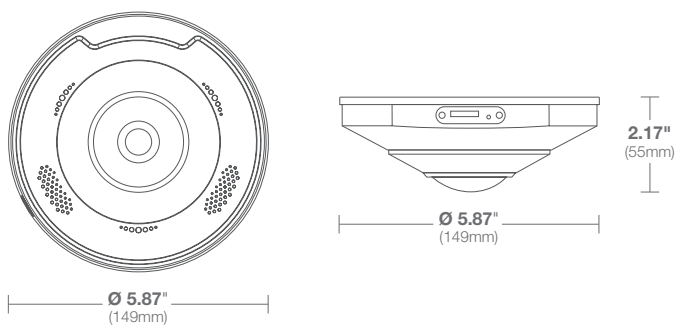
Model Numbers

12MP	AV12CPD-236	WDR

Accessories

AV-CRMA-W	Corner Mount Adapter (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)*
CF-CAP-W	Mounting Cap for ConteraIP Fisheye Dome (White)

Configurations

Surface mount dome

Create Your Model   (Example: AV12CPD-236)

Megapixel Resolution	Contera Product Line	Body Type		

AV	→	12	→	C	→	PD	→	-236
						Panoramic Dome		Single-Sensor Panoramic Fisheye

Rev 001.004

CE