AV COSTAR™

ConteraIP® MicroDome® Duo LX Megapixel Camera

4, 10, or 16 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

H.265

The ConteraIP MicroDome Duo LX features twin multi-megapixel cameras in a compact housing, and is ideal for a variety of professional indoor/outdoor surveillance requirements. Applications include coverage of a hallway or walkway, monitoring POS terminals or ATMs, or for viewing of a single wide area or two distinct regions.

ConteraIP MicroDome Duo LX is available with a choice of 4-, 10-, or 16-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.

The ConteraIP MicroDome Duo LX is ideal for applications with challenging lighting conditions regardless the time of day, supported by dual day/night mechanical IR cut filters. 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 (IEEE 802.3af) compliant network cable or via an 12–48V DC/24V AC power supply.

The installer-friendly ConteraIP MicroDome Duo LX enclosure shortens the installation process. ConteraIP MicroDome Duo 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 MicroDome Duo 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	Hallway 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

- 4MP, 10MP, and 16MP Models
- Remote Focus
- Easily Adjustable 3-Axis Gimbal
- 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

ONVIF | SGT

Camera Imaging Specifications

Model		AV4856DN		AV10856DN		AV16856DN	
Image Sensor (CMOS)		4MP (1080p x 2) CMOS Progressive Sensor		10MP (5MP x 2) CMOS Progressive Sensor		16MP (8MP x 2) CMOS Progressive Sensor	
Optical Format		1/2.8"		1/2.8"		1/2.8"	
Pixel Pitch		2.9µm		2.0µm		1.45µm	
Minimum Illumination	Color (Day Mode)	0.04 Lux		0.10 Lux		0.15 Lux	
	B/W (Night Mode)	0.004 Lux		0.010 Lux		0.015 Lux	
Full FOV Resolution		Total	3840 H x 1080 V	Total	5184 H x 1944 V	Total	7680 H x 2160 V
		Per Sensor	1920 H x 1080 V	Per Sensor	2592 H x 1944 V	Per Sensor	3840 H x 2160 V
Dynamic Range		Up to 100dB*		Up to 100dB*		Up to 100dB*	
Frame Rates**	At Max Resolution	30fps (4MP)		30fps (10MP)		15fps (16MP)	
	Multi-Stream	Up to 30fps (4MP) + 30fps (4MP)		Up to 30fps (10MP) + 10fps (10MP)		Up to 15fps (16MP) + 10fps (16MP)	
		Up to 30fps (4MP) + 30fps (4MP) + 30fps (1.8MP)		Up to 30fps (10MP) + 10fps (10MP) + 30fps (2.4MP) Up to 30fps (6MP) + 30fps (6MP) + 30fps (0.6MP)		Up to 15fps (8MP) + 10fps (8MP) + 15fps (1.8MP) Up to 15fps (8MP) + 15fps (5MP) + 15fps (1.8MP)	
Lens (x2)	2.8mm Lens Option (-28 Models)	2.8mm, F2.0, H-FOV = 106.7°		2.8mm, F2.0, H-FOV = 98°		2.8mm, F1.6, H-FOV = 106.7°	

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 *(Per Sensor)*	**4MP** — 1920x1080, 1280x960, 1280x720, 960x540, 800x600, 640x480, 640x360
	10MP — 2592x1944, 2560x1440, 2304x1296, 2048x1536, 1920x1080, 1600x1200, 1296x972, 1280x960, 1280x720, 800x600, 640x480
	16MP — 3840x2160, 2592x1944, 2560x1440, 2048x1536, 1920x1080, 1600x1200, 1296x972, 1280x960, 1280x720, 800x600, 640x480, 640x360
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

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)

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
Network Protocols	SNMP, HTTP, HTTPS, IPv6, IPv4, SSL, TCP/IP, UPnP, UDP, RTCP, RTSP, RTP, SMTP, NTP, DHCP, FTP, 802.1x, QoS, DDNS, Zero Configure
Network Interface	10/100/1000Mbps Ethernet, RJ45
Max Camera Bandwidth	20Mbps (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

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	PoE IEEE 802.3af, Class 3
Auxiliary Power	12-48V DC, 24V AC
Power Consumption	10.5W max

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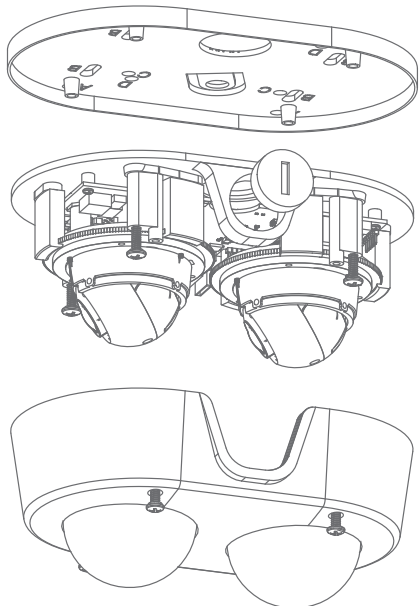
Streaming	Two-way
Compression	G.711 PCM 8 kHz
Input/Output	Line in***/ Line output

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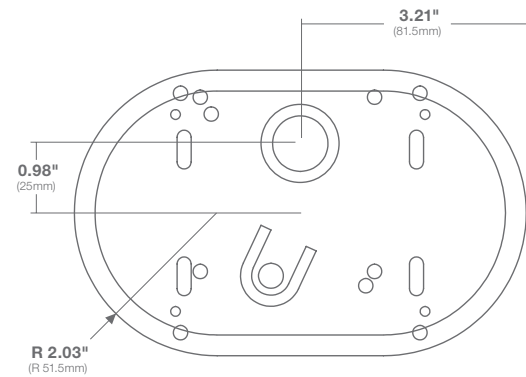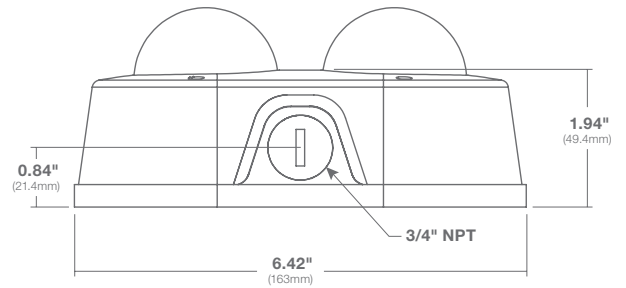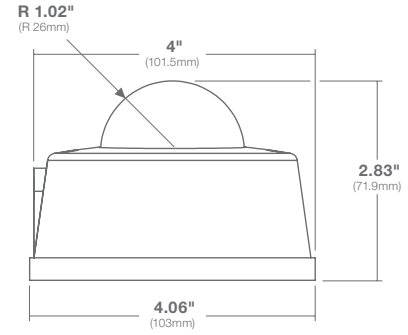** Maximum with H.264 compression
*** Requires Amplification

ConteraIP® MicroDome Duo LX Megapixel Cameras

Mechanical

Casing	Die-cast aluminum chassis with polycarbonate dome bubble	
	IP66 weather proof standard	
	Impact resistant, IK-10 rated	
Mount	Mount plate with electrical box adapter holes (included)	
Gimbal	Easily adjustable, 3-axis w/360° pan, 90° tilt, and 360° z-axis	
Dimensions *(See Dimensions)*	Unit	2.83" H (71.9mm) x 4.06" W (103mm) x 6.42" L (163mm)
	Packaged	3.74" H (95mm) x 4.72" W (120mm) x 7.09" L (180mm)
Weight	Unit	2.2lbs (1.0kg)
	Packaged	2.6lbs (1.2kg)
On Board Storage	MicroSDXC slot up to 256GB (card not included)	
Body Color	AV Costar White (Pantone® Cool Gray 1C)	

Quick Installation

Dimensions

See Next Page for Ordering Information

Configurations

MicroDome Duo

Model Numbers

4MP	AV4856DN-28	WDR
	AV4856DN-NL	WDR
10MP	AV10856DN-28	WDR
	AV10856DN-NL	WDR
16MP	AV16856DN-28	WDR
	AV16856DN-NL	WDR

Lens Options (Sold Separately)

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

[1] MPM2.8 (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)

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)
MDD-CMT-W	Pendant Mount and Cap with 1/2" NPT Standard for ConteraIP MicroDome Duo LX (AV Costar White)
MDD-WMT-W	Wall Mount and Cap with 1/2" NPT Standard for ConteraIP MicroDome Duo LX (AV Costar White)
MDD-FMA	Flush Mount Adapter for ConteraIP MicroDome Duo LX (White)

Create Your Model (Example: AV16856DN-28)

Megapixel Resolution	Generation	Body Type	Compression	True Day/Night	Lens

AV → 4 / 10 / 16 → 8 → 5 (MicroDome Duo) → 6 (H.265/H.264 + WDR) → DN (True Day/Night) → 28 (2.8mm Lens) / NL (No Lens)

Rev 001.002