

# ConteralP® 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+<sup>™</sup> (Smart Noise Adaptation and Processing), WDR (Wide Dynamic Range), and NightView<sup>™</sup> Models



The ConteralP 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.

ConteralP 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 ConteralP 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 ConteralP MicroDome Duo LX enclosure shortens the installation process. ConteralP 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<sup>™</sup> (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 MicroDome Duo LX is ONVIF (Open Network Video Interface Forum) Profile S, G, and T conformant, providing interoperability between network video products regardless of manufacturer.



Lenses with Remote















Wide Dynamic Range Hallway Capab

True Day/Night with IR Cut Filter

NightView



3-Axis Gimba

Resistant IK-10 and IP66 Rated

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

Focus Module **Series Features** 

- 4MP, 10MP, and 16MP Models
- Remote Focus
- Easily Adjustable 3-Axis Gimbal
- · Multiple Lens Options in a Single Camera Housing

SNAPstream-

Technology

- 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



# Conteral P® MicroDome Duo LX Megapixel Cameras

### Specifications

### Camera Imaging Specifications

Model		AV4956DN		AV10956DN		AV16956DN		
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 Color (Day Mode)		0.04 Lux		0.15 Lux		0.18 Lux		
Illumination B/W (Night Mode)		0.004	4 Lux	0.015 Lux		0.018 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 At Max Resolution		30fps (4MP)		15fps (10MP)		15fps (16MP)		
Rates**	Multi-Stream	WDR Off		IP) + 30fps (4MP) (0.46MP)	Up to 15fps (10MP) + 10fps (10MP) + 15fps (0.61MP)		Up to 15fps (16MP) + 10fps (4MP) + 15fps (0.46MP)	
		WDR On	Up to 30fps (4MP) + 30fps (4MP) + 30fps (0.46MP)		Up to 15fps (10MP) + 10fps (10MP) + 15fps (0.61MP)		Up to 15fps (16MP) + 10fps (4MP) + 15fps (0.46MP)	
Lens (x2)	Lens (x2) 2.8mm Lens		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	1	Real-time, 1024 detection zones
Privacy Masking		Unlimited
Backlight Compe	ensation	Auto
White Balance M	ode	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 Ra	ange	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	<b>CE:</b> EN55032 Class A, EN55035, EN61000-3-2, EN61000-3-3
Mechanical	IK-10 (EN62262), IP66 (EN60529)

Data Transmission

ilevels of quality       Bit Rate Control     4MP/10MP Models: 128K-8000K       Smart Codec     Smart GOP/Smart ROI       Network Protocols     SNMP, HTTP, HTTPS, IPv6, IPv4, SSL, TCP//P, UPnP, UDP, RTCP, RTSP, RT	Compression Type		H.265/H.264 (MPEG-4, Part 10)/Motion JPEG	
16MP Models: 512K-8000KSmart CodecSmart GOP/Smart ROINetwork ProtocolsSNMP, HTTP, HTTPS, IPv6, IPv4, SSL, TCP/IP, UPnP, UDP, RTCP, RTSP, RTP, SMTP, NTP, DHCP, FTP, 802.1x, QoS, DDNS, Zero ConfigureNetwork Interface10/100/1000Mbps Ethernet, RJ45Muti-Streaming2 x H.265/H.264 stream, 1 x M-JPEG stream (per sensor)Users2 x H.265/H.264 stream, 1 x M-JPEG stream (per sensor)Event ManagerMution detection, tampering detection, alarm inNotificationsSend a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4Porenting Temperature-40°C (-40°F) to +50°C (122°F)Humidity9% to 90% (non-condensing)Storage Temperature-40°C (-40°F) to +60°C (140°F)Electrical-40°C (-40°F) to +60°C (140°F)Power Over Ethervet11put (wet contact)/1 output (wet contact)Power Consumptio12-48V DC, 24V ACPower Consumptio10-5W maxAudio Electrical10-5W maxStreaming CompressionTwo-wyStreaming CompressionTwo-wy			21 levels of quality	
Network ProtocolsSNMP, HTTP, HTTPS, IPv6, IPv4, SSL, TCP/IP, UPP, UDP, RTCP, RTSP, RTP, SMTP, NTP, DHCP, FTP, 802.1x, QoS, DDNS, Zero ConfigureNetwork Interface10/100/1000Mbps Ethernet, RJ45Max Camera Bandwitth18Mbps (9Mbps per sensor)Muti-Streaming2 x H.265/H.264 stream, 1 x M-JPEG stream (per sensor)UsersLive Viewing/Administrator for up to 10 clientsEvent ManageSend a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4NotificationsSend a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4Environmental-40°C (-40°F) to +50°C (122°F)Humidity0% to 90% (non-condensing)Storage Temperature-40°C (-40°F) to +60°C (140°F)Electrical-40°C (-40°F) to +60°C (140°F)Auxiliary Power1 input (wet contact)/1 output (wet contact)Power Consumptior12-48V DC, 24V ACPower Consumptior10.5W maxAuxiliary Power10.5W maxAuxiliary Power10.5W maxStreaming CompressionTwo-waStreaming CompressionTwo-wa	Bit Rate Control			
RTSP, RTP, SMTP, NTP, DHCP, FTP, 802.1x, QoS, DDNS, Zero Configure         Network Interface       10/100/1000Mbps Ethernet, RJ45         Max Camera Bandwith       18Mbps (9Mbps per sensor)         Muti-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       Motion detection, tampering detection, alarm in         Notifications       Send a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4         Porerating 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)         Flectrical       Input (wet contact)/1 output (wet contact)         Power Over Ethernet       10 input (wet contact)/1 output (wet contact)         Power Consumption       10-SW max         Auxiliary Power       12-48V DC, 24V AC         Power Consumption       10-SW max         Auxilio Electrical       Input (Max	Smart Codec		Smart GOP/Smart ROI	
Max Camera Bandwith       18/Mbps (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 Managemet       Motion detection, tampering detection, alarm in         Notifications       Send a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4         Environmental       -40°C (-40°F) to +50°C (122°F)         Poerating Temperature       0% to 90% (non-condensing)         Storage Temperature       0% to 90% (non-condensing)         Electrical       -40°C (-40°F) to +60°C (140°F)         Power Over Etherrer       1 input (wet contact)/1 output (wet contact)         Power Over Etherrer       90E IEEE 802.3af, Class 3         Auxiliary Power       10.5W max         Auxilio Electrical       Streaming         Streaming       Tu-wu         Audio Electrical       Streaming         Streaming       Tu-wu         Audio Electrical       Streaming	Network Protocols		RTSP, RTP, SMTP, NTP, DHCP, FTP, 802.1x, QoS, DDNS,	
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 Manage       Motion detection, tampering detection, alarm in         Notifications       Send a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4         Environmental       -40°C (-40°F) to +50°C (122°F)         Humidity       9% to 90% (non-condensing)         Storage Temperature       -40°C (-40°F) to +60°C (140°F)         Electrical       1 input (wet contact)/1 output (wet contact)         Power Over Ether       1 liput (wet contact)/1 output (wet contact)         Power Over Ether       12-48V DC, 24V AC         Power Consumption       10.5W max         Audio Electrical       Streaming         Kucilio Electrical       Streaming         Streaming       10.5W max	Network Interface		10/100/1000Mbps Ethernet, RJ45	
Users       Live Viewing/Administrator for up to 10 clients         Event Management       Event Trigger         Kernt Trigger       Motion detection, tampering detection, alarm in         Notifications       Send a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4         Environmental       Send a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4         Environmental       -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       -40°C (-40°F) to +60°C (140°F)         Alarm Input/Output       1 input (wet contact)/1 output (wet contact)         Power Over Ethernet       PoE IEEE 802.3af, Class 3         Auxiliary Power       10.5W max         Audio Electrical       Streaming         Streaming       Two-wa         Streaming       Two-wa	Max Camera Bandwi	dth	18Mbps (9Mbps per sensor)	
Event Manager       Motion detection, tampering detection, alarm in         Notifications       Send a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4         Environmental	Multi-Streaming		2 x H.265/H.264 stream, 1 x M-JPEG stream (per sensor)	
Event Trigger       Motion detection, tampering detection, alarm in         Notifications       Send a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4         Environmental       Fervironmental         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       -40°C (-40°F) to +60°C (140°F)         Alarm Input/Output       1 input (wet contact)/1 output (wet contact)         Power Over Etherwt       1 input (wet contact)/1 output (wet contact)         Auxiliary Power       12-48V DC, 24V AC         Power Consumptior       10.5W max         Audio Electrical       Streaming         Streaming       Two-ware         Streaming       Two-ware	Users		Live Viewing/Administrator for up to 10 clients	
Notifications       Send a message via e-mail/FTP/NAS, SD Card Recording, Record JPG/MP4         Environmental       -40°C (-40°F) to +50°C (122°F)         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       -40°C (-40°F) to +60°C (140°F)         Alarm Input/Output       1 input (wet contact)/1 output (wet contact)         Power Over Etherret       PoE IEEE 802.3af, Class 3         Auxiliary Power       12-48V DC, 24V AC         Power Consumptior       10.5W max         Audio Electrical	Event Managen	nent		
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     -40°C (-40°F) to +60°C (140°F)       Alarm Input/Output     1 input (wet contact)/1 output (wet contact)       Power Over Etherner     PoE IEEE 802.3af, Class 3       Auxiliary Power     12-48V DC, 24V AC       Power Consumption     10.5W max       Audio Electrical     Streaming       Streaming     Two-way       Compression     6.711 PCM 8 kHz	Event Trigger		Motion detection, tampering detection, alarm in	
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       -40°C (-40°F) to +60°C (140°F)         Electrical       Poser Over Ethernet         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       Electrical         Streaming       Two-way         Compression       G.711 PCM 8 kHz	Notifications			
Humidity       0% to 90% (non-condensing)         Storage Temperature       -40°C (-40°F) to +60°C (140°F)         Electrical       I input (wet contact)/1 output (wet contact)         Alarm Input/Output       1 input (wet contact)/1 output (wet contact)         Power Over Etherrer       PoE IEEE 802.3af, Class 3         Auxiliary Power       12-48V DC, 24V AC         Power Consumptior       10.5W max         Audio Electrical       Streaming         Two-way       Gompression         G.71 PCM 8 kHz       External kHz	Environmental			
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 Etherner     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	Operating Temperatu	ire	-40°C (-40°F) to +50°C (122°F)	
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Alarm Input/Output       1 input (wet contact)/1 output (wet contact)         Power Over Etherner       PoE IEEE 802.3af, Class 3         Auxiliary Power       12-48V DC, 24V AC         Power Consumption       10.5W max         Audio Electrication       Norwax         Streaming       Two-way         Gompression       G.71 PCM 8 kHz	Storage Temperature	•	-40°C (-40°F) to +60°C (140°F)	
Power Over Ethernet     PoE IEEE 802.3af, Class 3       Auxiliary Power     12-48V DC, 24V AC       Power Consumption     10.5W max       Audio Electrication     Image: Streaming transmission of the sector of the secto	Electrical			
Auxiliary Power     12-48V DC, 24V AC       Power Consumption     10.5W max       Audio Electrication     10.5W max       Streaming     Two-way       Compression     G.711 PCM 8 kHz	Alarm Input/Output		1 input (wet contact)/1 output (wet contact)	
Power Consumption     10.5W max       Audio Electricat     Image: Compression       Gompression     G.711 PCM 8 kHz	Power Over Ethernet		PoE IEEE 802.3af, Class 3	
Audio Electrical       Streaming     Two-way       Compression     G.711 PCM 8 kHz	Auxiliary Power		12-48V DC, 24V AC	
Streaming     Two-way       Compression     G.711 PCM 8 kHz	Power Consumption		10.5W max	
Compression G.711 PCM 8 kHz	Audio Electrical			
	Streaming Two-		way	
Input/Output Line in**/ Line output	Compression	G.71	1 PCM 8 kHz	
	Input/Output Line		in**/ Line output	

\* Maximum with digital WDR \*\* Requires Amplification

# Conteral P® MicroDome Duo LX Megapixel Cameras

### Specifications

#### Mechanical

Casing	Die-cast aluminum chassis with polycarbonate dome bubble			
	IP66 weathe	r 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	Unit	2.83" H (71.9mm) x 4.06" W (103mm) x 6.42" L (163mm)		
(See Dimensions)	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 1TB (card not included)			
Body Color AV Costar White (Pantone® Cool Gray 1C)		hite (Pantone <sup>®</sup> Cool Gray 1C)		

### Quick Installation



#### Dimensions







# ConteralP<sup>®</sup> MicroDome Duo LX Megapixel Cameras

### Ordering Information

<sup>1</sup> MPM2.8C (2.8mm) is the default lens for -28 models



Model Numbers

4MP	AV4956DN-28	WDR
10MP	AV10956DN-28	WDR
16MP	AV16956DN-28	WDR

Lens Options (Sold Separately)

Model	Focal	Horizontal Field of View Per Sensor			
	Length	4MP (1080p x 2)	10MP (5MP x 2)	16MP (8MP x 2)	
MPM2.4D	2.4mm	134°	126°	135°	
MPM2.8C <sup>1</sup>	2.8mm	106.7°	98°	106.7°	
MPM4.0D	4mm	83.95°	78.24°	83.95°	
MPM6.0D	6mm	51.27°	47.75°	51.27°	
MPM8.0D	8mm	41.26°	38.56°	41.26°	
MPM12.0D	12mm	26.62°	24.84°	26.62°	
MPM16.0D	16mm	19.4°	18.09°	19.4°	

Accessories (Sold Separately)

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

### Create Your Model (Example: AV16956DN-28)



Configurations



MicroDome Duo LX