

MegaVideo® Flex IP Megapixel Cameras

1.2, 1080p, 3, and 5 Megapixel (MP) H.264 Remote Focus True Day/Night Indoor Tethered IP Cameras with SNAPstream™ (Smart Noise Adaptation and Processing), Enhanced WDR™ (Wide Dynamic Range), and NightView™ Models, and Optional IR LEDs



The MegaVideo® Flex camera series offers a cost-effective security solution for installations that require a discrete, flexible, and compact design. Due to its small size, the MegaVideo Flex easily fits into a wide range of spaces. These indoor cameras feature a choice of 1.2MP, 1080p, 3MP, and 5MP resolution options.

Regardless of time-of-day, this true day/night camera is ideal for applications with variable lighting conditions. For challenging low-light applications, the MegaVideo Flex 1.2MP model features NightView™, making it capable of covering areas where very little light is present. Applications with bright or over saturated lighting conditions can be overcome with Enhanced WDR™ wide dynamic range (available on select models).

The MegaVideo Flex is comprised of the camera sensor, metal mounting bracket, USB cable, and the main camera unit. Installing the MegaVideo Flex is simple. The camera can be surface mounted via the supplied mounting bracket or flush mounted in a ceiling or wall with the two (2) fastening nuts. No additional mounting accessories are required. For added flexibility, the USB cable allows the camera to be mounted in one area while the main camera unit is mounted up to 40ft (12m) away. Each camera includes both a white and a black trim ring so it easily blends into the environment.

For easy identification of events or intruders in low-light applications, the main unit features two (2) USB ports to combine optional infrared illumination (sold separately). Each IR illuminator includes six (6) infrared 850nm LEDs providing up to 50ft (15m) of night vision.

These cameras are enhanced with the added convenience of remote focus to facilitate ease of set-up and future adjustments, reducing time spent at the job-site. The ability to interchange the lenses, makes the flexibility of this camera unsurpassed. Lens options include: 2.1mm, 2.8mm, 4mm, 6mm, 8mm, 12mm, and 16mm.

The MegaVideo Flex camera series offers advanced streaming capabilities and is designed on an efficient H.264 encoding platform to deliver high quality video without straining the network. Power can be supplied via a single Power-over-Ethernet compliant network cable or via a 12–48V DC/24V AC power supply. The camera's interface allows for an intuitive, fast, and easy configuration. The AV IP Utility™ tool allows users to quickly configure multiple cameras at one time when required.



Series Features

- 1.2, 1080p, 3, or 5MP Models
- Camera Sensor Unit and Main Unit can be Connected with a High Quality USB Cable up to 40ft (12m) in Length
- SNAPstream™ (Smart Noise Adaptation and Processing) Capability to Reduce Bandwidth without Impacting Image Quality
- Strong Low Light Performance with NightView™ for 1.2MP Models and Binning Mode for 3MP and 5MP Models
- True Day/Night Functionality with Mechanical IR Cut Filter
- Enhanced WDR™ up to 100dB at Full Resolution Available on Select 1080p and 3MP Models
- CorridorView™ Allows 90° Image Rotation for Better Coverage in Hallways and Corridors
- Dual Encoder H.264/MJPEG
- Remote Focus Module in Camera Sensor Unit
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting, Forensic Zooming, and Non-Integer Scaling
- Multiple Lens Options Available (Sold Separately)
- Network Protocols Include IPv6, QoS, DHCP, and More
- All-in-One Total Power Over Ethernet (PoE) Solution
- Ultra Low Profile Design / Small Size
- Optional IR LED Units (Connect a Maximum of Two)
- SDHC Card Slot for Onboard Storage
- IK-10 Impact-Resistant Housing
- Water Resistant from Front of Sensor Unit and IR Units
- Vibration and Shock Resistant (EN61373)

Camera Imaging Specifications

Model		AV1195DN	AV2195DN	AV2196DN	AV3195DN	AV3196DN	AV5195DN
Image Sensor (CMOS)		1.2MP	1080p (2.1MP)	1080p (2.1MP)	3MP	3MP	5MP
Optical Format		1/3"	1/3"	1/3.2"	1/3"	1/3.2"	1/2.5"
Pixel Pitch		3.75µm	2.2µm	2.2µm	2.2µm	2.2µm	2.2µm
Minimum Illumination	Color (Day Mode)	0.03 Lux	0.2 Lux	0.2 Lux	0.2 Lux	0.2 Lux	0.3 Lux
	Color Binning (Day Mode)	-	-	-	0.1 Lux	0.1 Lux	0.15 Lux
	B/W (Night Mode)	0.003 Lux, IR sensitive	0.02 Lux, IR sensitive	0.02 Lux, IR sensitive	0.02 Lux, IR sensitive	0.02 Lux, IR sensitive	0.03 Lux, IR sensitive
Full FOV Resolution		1280 H x 960 V	1920 H x 1080 V	1920 H x 1080 V	2048 H x 1536 V	2048 H x 1536 V	2592 H x 1944 V
1/4 Resolution		640 H x 480 V	960 H x 540 V	960 H x 540 V	1024 H x 768 V	1024 H x 768 V	1296 H x 972 V
Scaling (See Chart on Page 4)		-	Yes	Yes	Yes	Yes	Yes
Dynamic Range		83.5dB	69.5dB	WDR up to 100dB	69.5dB	WDR up to 100dB	70.1dB
Frame Rates**	At Max Res.	37fps (1280 x 960)	30fps (1920 x 1080)	30fps (1920 x 1080)	21fps (2048 x 1536)	21fps (2048 x 1536)	11fps (2592 x 1944)
	Cropped	-	30fps (1280 x 1024)	30fps (1280 x 1024)	30fps (1920 x 1080) 30fps (1280 x 1024)	21fps (1920 x 1080) 21fps (1280 x 1024)	16fps (2048 x 1536) 24fps (1920 x 1080) 33fps (1280 x 1024)
	Binning Mode	-	-	-	42fps (1024 x 768) 59fps (960 x 540)	21fps (1024 x 768) 21fps (800 x 600) 21fps (960 x 540) 21fps (640 x 512)	27fps (1296 x 972) 37fps (1024 x 768) 48fps (960 x 540)
Lens***	Fixed Iris	MPM2.8A 2.8mm, 1/2.5", F/1.8, IR corrected, M12-mount					
	H-FOV	95°	83°	83°	89°	89°	113°

SituationalPlus™

Model	Lens	View Angle	Distance to pixel density (ft.)(m)		
			30ppf (100ppm)	60ppf (200ppm)	90ppf (300ppm)
AV1195DN	MPM2.1	130°	> 1' (0.3m)	> 1' (0.3m)	> 1' (0.3m)
	MPM2.8A***	95°	19' (5.8m)	9.5' (2.9m)	6' (1.8m)
	MPM4.0A	67°	32' (9.8m)	16' (4.9m)	10.5' (3.2m)
	MPM6.0	46°	49.5' (15.1m)	25' (7.6m)	16' (4.9m)
	MPM8.0	35°	65.5' (20m)	34' (10.4m)	22' (6.7m)
	MPM12.0A	23°	105' (32m)	50' (15.2m)	35' (10.7m)
AV2195DN	MPM2.1	113°	17.5' (5.3m)	> 1' (0.3m)	> 1' (0.3m)
	MPM2.8A***	83°	35' (10.7m)	16.5' (5m)	9' (2.7m)
	MPM4.0A	59°	55' (16.8m)	27' (8.2m)	17' (5.2m)
	MPM6.0	40°	85' (25.9m)	43' (13.1m)	28' (8.5m)
	MPM8.0	30°	120' (36.6m)	59' (18m)	39' (11.9m)
	MPM12.0A	20°	180' (54.9m)	90' (27.4m)	60' (18.3m)
AV2196DN	MPM2.1	113°	17.5' (5.3m)	> 1' (0.3m)	> 1' (0.3m)
	MPM2.8A***	83°	35' (10.7m)	16.5' (5m)	9' (2.7m)
	MPM4.0A	59°	55' (16.8m)	27' (8.2m)	17' (5.2m)
	MPM6.0	40°	85' (25.9m)	43' (13.1m)	28' (8.5m)
	MPM8.0	30°	120' (36.6m)	59' (18m)	39' (11.9m)
	MPM12.0A	20°	180' (54.9m)	90' (27.4m)	60' (18.3m)
AV3195DN	MPM2.1	121°	15' (4.6m)	> 1' (0.3m)	> 1' (0.3m)
	MPM2.8A***	89°	34' (10.4m)	15.5' (4.7m)	8' (2.4m)
	MPM4.0A	63°	55' (16.8m)	26.5' (8.1m)	16.5' (5m)
	MPM6.0	43°	86' (26.2m)	42.5' (13m)	27.5' (8.4m)
	MPM8.0	33°	114.5' (34.9m)	56' (17.1m)	37.5' (11.4m)
	MPM12.0A	22°	174.5' (53.2m)	87' (26.5m)	58' (17.7m)
AV3196DN	MPM2.1	121°	15' (4.6m)	> 1' (0.3m)	> 1' (0.3m)
	MPM2.8A***	89°	34' (10.4m)	15.5' (4.7m)	8' (2.4m)
	MPM4.0A	63°	55' (16.8m)	26.5' (8.1m)	16.5' (5m)
	MPM6.0	43°	86' (26.2m)	42.5' (13m)	27.5' (8.4m)
	MPM8.0	33°	114.5' (34.9m)	56' (17.1m)	37.5' (11.4m)
	MPM12.0A	22°	174.5' (53.2m)	87' (26.5m)	58' (17.7m)
AV5195DN	MPM2.1****	-	-	-	-
	MPM2.8A***	113°	27' (8.2m)	12' (3.7m)	5' (1.5m)
	MPM4.0A	80°	51' (15.5m)	24.5' (7.5m)	15' (4.6m)
	MPM6.0	56°	80' (24.4m)	40' (12.2m)	26' (7.9m)
	MPM8.0	42°	114' (34.7m)	56' (17.1m)	36' (11m)
	MPM12.0A	28°	175' (53.3m)	86' (26.2m)	57' (17.4m)
MPM16.0	20°	245' (74.7m)	122' (37.2m)	81' (24.7m)	

Programmability

Optics	M12 lens and remote focus module
Low Light Performance	NightView™ 1.2MP models
	Pixel Binning Mode 3MP and 5MP models
Picture-in-Picture	Simultaneous delivery of full field-of-view and zoomed images
Programmable Shutter Speed	Controls motion blur, 1ms–500ms
Motion Detection	Real-time, 1024 detection zones
Privacy Masking	Unlimited
Flexible Cropping	Resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264
Backlight Compensation	Custom white balance
Flicker Control	5Hz–255Hz adjustable
Image Rotation	CorridorView™ (90°, 180°, and 270° image rotation)
Wide Dynamic Range	Auto switch control adjustment between WDR and LDR modes (WDR models)
Efficiency	SNAPstream™ (Smart Noise Adaptation and Processing)
	Bit rate and bandwidth limitation control
	Bandwidth and storage savings by running at 1/4 resolution
Sharpness	Selectable enhancement level
Miscellaneous	Programmable resolution, brightness, saturation, gamma, tint
	Electronic pan, tilt, zoom (PTZ)

** Maximum with H.264 compression
 *** MPM2.8A (2.8mm) is the default lens with the exception of "-NL" models
 **** Lens not recommended for use with this resolution

Data Transmission

Compression Type	H.264 (MPEG-4, Part 10)/Motion JPEG 21 levels of quality
Network Protocols	HTTP, IPv4, IPv6, QoS, RTSP, RTP/TCP, RTP/UDP, TFTP, DHCP
Network Interface	100Base-T Ethernet
Multi-Streaming	8 non-identical streams

Compliance

Industry Standard	ONVIF Profile S conformant
Listings	UL CB Scheme: IEC 60950-1(Ed.2), IEC 60950-1(Ed.2); Am.1, IEC 60950-1(Ed.2); Am.2, IEC 60950-22(Ed.1)
FCC Compliance	Title 47, Part 15 (47 CFR 15) Subpart B Class A
Environmental	REACH 1907/2006/EC, WEEE 2012/19/EU
Markings	CE: 2014/30/EU (EMC Directive), 2014/35/EU (Low Voltage Directive), 2011/65/EU (RoHS Directive) EN 55022:2010 Class A, EN 55024:2010, EN 61000-3-2:2006+A1:2009+A2:2009, EN61000-3-3: 2008 EN 60950-1:2006 + A11:2009 + A12:2011 + A2:2013
Mechanical	Shock and vibration (EN61373), IK-10
CoO	Made in the USA

Environmental

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

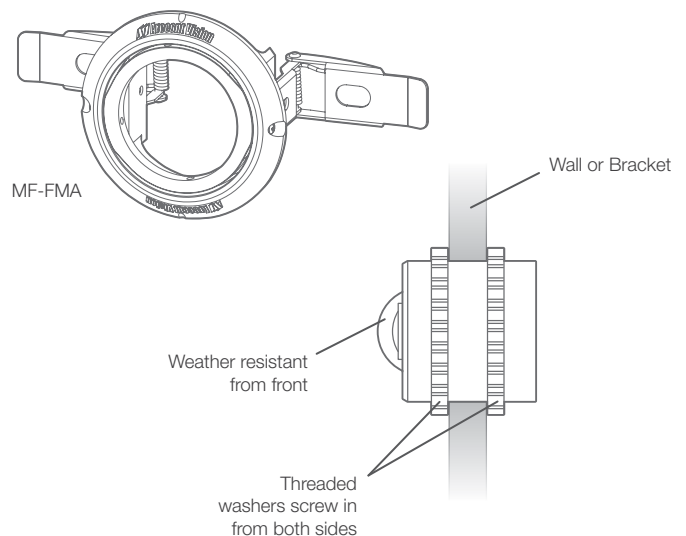
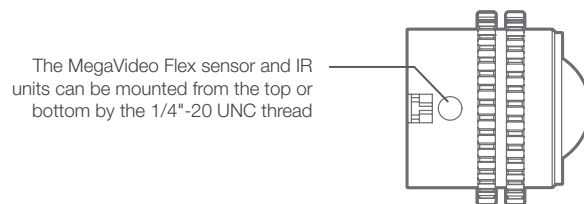
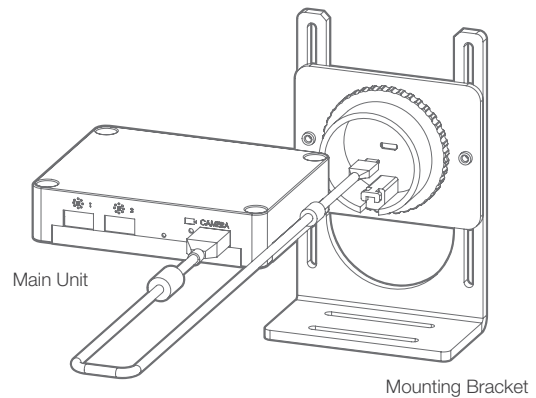
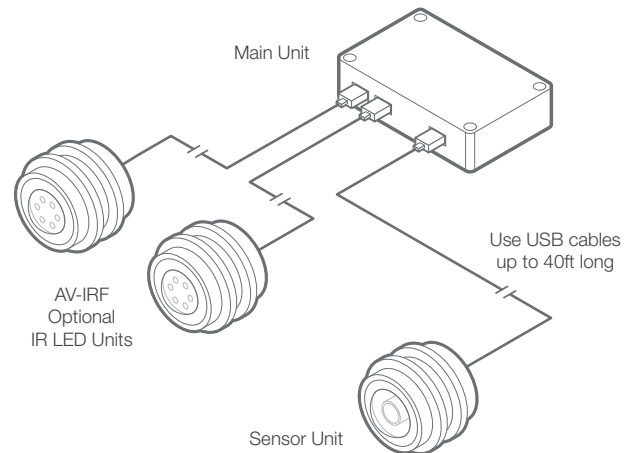
Electrical

Alarm Input/Output	General purpose opto-coupled, 1 input/1 output
Power Over Ethernet	PoE 802.3af, Class 3
Power Consumption	10.5W DC power max 14.2W DC power max (with two IR units on)
Auxiliary Power	12-48V DC/24V AC (barrel plug, 2.1mm I.D. x 5.5mm O.D. x 9.5mm, positive center)

Mechanical

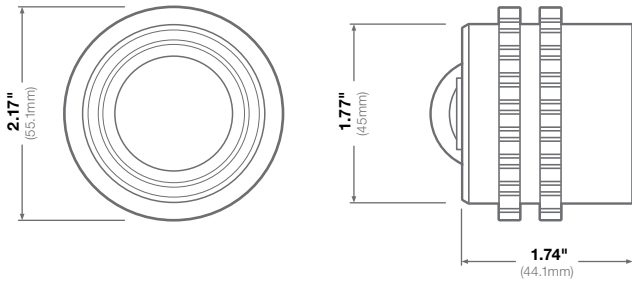
Casing	Tamper-resistant housing, IK-10 impact-resistant Weather resistant from front	
Lens	2.8mm board mount (M12), fixed iris, F/2.0 (except -NL models)	
Dimensions <small>(See Dimensions)</small>	Main Unit	0.94" H (24mm) x 3.23" W (82mm) x 4.09" L (104mm)
	Sensor Unit	Ø 1.77" (45mm) x 1.74" W (44.1mm)
	Packaged	4.5" H (114mm) x 5.8" W (147mm) x 5.9" L (150mm)
Weight	Unit	0.7lbs (0.3kg)
	Packaged	1.3lbs (0.6kg)
USB Cables	5' (1.5m)	
	40' (12m)	

Quick Installation

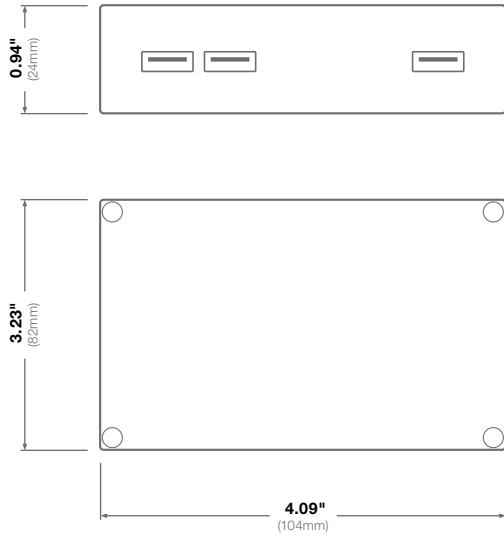


Dimensions

Sensor Unit



Main Unit



Scaling Resolution Chart†

Scaled Resolution	Horizontal	Vertical	Pixel Count
720p	1280	720	921600
XVGA	1024	768	786432
DVGA (16:9)	1136	640	727040
DVGA (3:2)	960	640	614400
SVGA	800	600	480000
D1 (PAL)	720	576	414720
4CIF (PAL)	704	576	405504
D1 (NTSC)	720	480	345600
4CIF (NTSC)	704	480	337920
VGA	640	480	307200
2CIF (PAL)	704	288	202752
HVGA (4:3)	480	360	172800
2CIF (NTSC)	704	240	168960
HVGA (8:3)	640	240	153600
HVGA (3:2)	480	320	153600
HVGA (16:9)	480	272	130560
CIF (PAL)	352	288	101376
CIF (NTSC)	352	240	84480
QVGA (SIF)	320	240	76800
QCIF (PAL)	176	144	25344
QCIF (NTSC)	176	120	21120
SQCIF	128	96	12288

† All scaled resolutions are available on all cameras that support scaling

See Next Page for Ordering Information

Ordering Information



Model Specific Features

Model	Resolution	Frame Rate**	Features	
AV1195DN	1.2MP	37fps	-	NightView™
AV2195DN	1080p	30fps	-	-
AV2196DN	1080p	30fps	WDR	-
AV3195DN	3MP	21fps	-	Binning
AV3196DN	3MP	21fps	WDR	Binning
AV5195DN	5MP	12fps	-	Binning

** Maximum with H.264 compression

Model Numbers¹

1.2MP	AV1195DN	NightView
	AV1195DN-NL	NightView
1080p	AV2195DN	
	AV2195DN-NL	
	AV2196DN	WDR
	AV2196DN-NL	WDR
3MP	AV3195DN	
	AV3195DN-NL	
	AV3196DN	WDR
	AV3196DN-NL	WDR
5MP	AV5195DN	
	AV5195DN-NL	

¹ All parts include a main unit, sensor unit, optional light gray front ring and bubble for sensor unit, 40ft (12m) and 5ft (1.5m) USB 2.0 to micro USB 28/24 AWG, shielded twisted pair cable, and a mounting bracket

Accessories

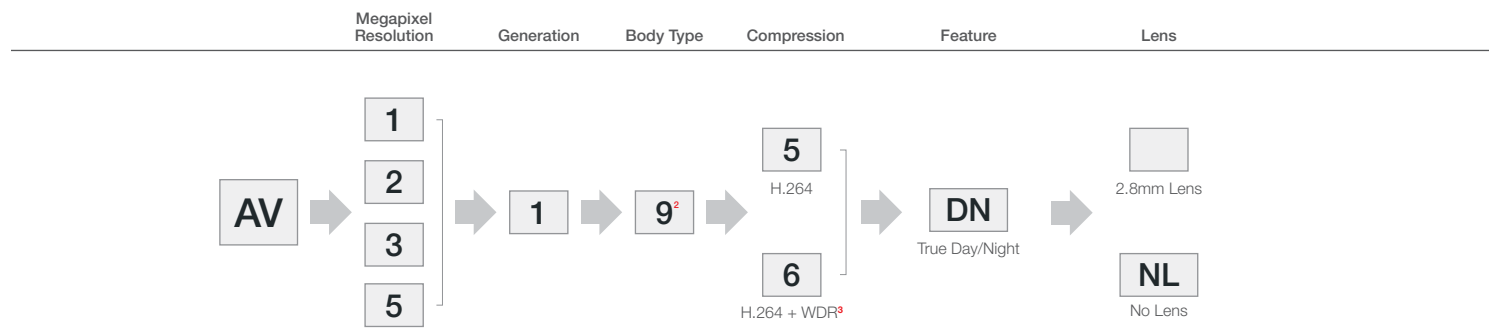
AV-IRF	Single IR illuminator unit includes 6 pcs 850nm LEDs / 40ft (15m) IR distance (max) / 80° IR angle, for use with MegaVideo® Flex only
MF-FMA	In-ceiling flush mount for MegaVideo Flex

Lens Options (Sold Separately)

Model	Focal Length	Horizontal Field of View					
		1.2MP	1080p	1080p WDR	3MP	3MP WDR	5MP
MPM2.1	2.1mm	130°	113°	113°	121°	121°	-
MPM2.8A***	2.8mm	95°	83°	83°	89°	89°	113°
MPM4.0A	4mm	67°	59°	59°	63°	63°	80°
MPM6.0	6mm	46°	40°	40°	43°	43°	56°
MPM8.0	8mm	35°	30°	30°	33°	33°	42°
MPM12.0A	12mm	23°	20°	20°	22°	22°	28°
MPM16.0	16mm	17°	15°	15°	16°	16°	20°

*** MPM2.8A (2.8mm) is the default lens with the exception of "-NL" models

Create Your Model (Example: AV3196DN-NL)



² "9" represents the MegaVideo Flex product line

³ WDR for AV2196 and AV3196 models only