

Streetlight-mounted ENVR2X

Plug in and power up
for safer cities



ENVR2X, Motorola Solutions' first-of-its-kind, ruggedized appliance that mounts directly to streetlights, providing NVR storage, camera support and an LTE modem. The **ENVR2X** streamlines urban management through our strategic partnership with Ubicquia®, integrating public safety and Ubicquia-powered light control into a single unit.



All-in-one design

Stay on top of what's happening at your site with built-in video analytics to alert you on unusual activity and potentially critical events.



Streamlined deployment

Identify people of interest on your secure watch list(s). Assistive facial recognition can help equip you with the context for potentially critical events, so you can act faster.



Wireless connectivity

Locate people or vehicles of interest in seconds by entering physical descriptions, uploading a photo, or by finding an example within recorded video.



Outdoor durability

Sites connected to the cloud and subscriber health can use system health monitoring to increase system availability, streamline maintenance time, and minimize on-site service calls.



MOTOROLA SOLUTIONS

Analytics



Classified Object Detection™ (COD)

Detects and classifies people or vehicles to help operators respond faster. Unusual Activity Detection (UAD) automatically detects atypical behavior of learned objects.

UNITY8-ENT required



Avigilon Appearance Search™ (AS)

Quickly locates a specific person or vehicle of interest across an entire site using a sophisticated deep learning AI search engine.

UNITY8-ENT required



Facial Recognition (FR)

Detects matches from managed watchlists to alert operators of people of interest. Requires Appearance Search and an additional license.

UNITY8-FACE required



Visible Firearm Detection (VFD)

Detects visible handguns and long guns handled by humans. Requires an ENVR2X with an additional license.

UNITY8-VFD-1YR required



Occupancy Counting

With cameras at entrances and exits, a running total of occupancy can be monitored in real time.

ACS Required

Model	Analytics Cameras ¹		Non-Analytic Cameras ¹				
	AS Only ²	FR + AS ³	COD Only ²	COD + AS ³	COD + AS + FR ³	COD + AS ³ + VFD ⁴	COD + AS ³ + VFD ⁴ + FR
ENVR2X	10	10	8	8	8	4	4
<div>¹ Assumes each channel consists of a H.264/H.265 2MP 30 FPS primary stream and a low resolution 30 FPS secondary stream with moderate ONVIF Profile S motion metadata as well as appliance-wide average per camera rates of classified objects leaving the field of view: H6A/H5A cameras – one every second; H4A cameras – one every two seconds; non-analytics cameras running COD – one every second. Each multisensor camera with 3-4 sensors is considered equivalent to 3-4 cameras.</div> <div>² For cameras at 2MP and 30 frames per second (fps). Requires Unity Video 8.7.3 or later.</div> <div>³ Requires H6A, H5A, H4A cameras, or Classified Object Detection running on non-analytic cameras.</div> <div>⁴ When enabling VFD, Avigilon cameras must disable analytics on the camera, enable COD, and count the camera as a non-analytic camera.</div>							

See [Device Types Supported for Server Side Analytics](#) in the [Analytics Sizing Guide](#) for device requirements and restrictions.

Video Streaming

Rate		Channels
Local Recording (On-board Storage)		
Recording	Up to 48 Mbps	Up to 8
1 GbE Connection (Wired SFP/Ethernet Connection) ¹		
Livestream	Up to 48 Mbps	Up to 8
Playback ²	Up to 24 Mbps	Up to 4
LTE Connection (Wireless Connection) ³		
Livestream	Up to 12 Mbps	Up to 2
Playback	Up to 12 Mbps	Up to 2
Assumes each channel consists of a H.264/H.265 2MP 30 FPS primary stream and a low resolution 30 FPS secondary stream with moderate ONVIF Profile S motion metadata.		
¹ Total combined Livestream and Playback throughput for wired connections cannot exceed 48 Mbps.		
² Playback is a maximum of 24 Mbps of the total stream capacity.		
³ Performance varies by signal strength. Figures shown are conservative estimates based on standard LTE connectivity.		

Specifications

System	
Avigilon Unity Video Edition	Pre-installed with Unity Video 8
Network Connection	LTE modem, 10/100/1000 Mbps RJ45 Ethernet, 1.25 Gbps SFP fiber optic transceiver (optional accessory)
Operating System	Avigilon Hardened OS, supports secure remote upgrades
OS Drive	128 GB M.2 SSD Drive
Storage Capacity	4 TB M.2 SSD Drive
PoE++ Ports	4 × RJ45 10/100/1000 Mbps (IEEE 802.3bt Type 3) ¹
Total PoE Power Budget	80 W
PoE Power per Port	0-60 W (sum of all ports must be below the Total PoE Power Budget)
Cellular Connectivity	LTE only (requires customer supplied Nano SIM card)
Impact Rating	IK08
Memory	16 GB 128-bit LPDDR5
Processor (CPU+GPU)	NVIDIA Jetson System-on-Module (SOM)
Local Viewing	No video outputs – Web-based administration only
Warranty	18-month warranty
¹ One PoE++ port can be used as the outbound network connection.	

Mechanical	
Dimensions (H × W × D)	78 mm × 190 mm × 450 mm; 3.1" × 7.5" × 17.7"
Weight	Max: 6.12 kg (13.5 lbs)
Effective Projected Area	0.38 ft²; 0.0353 m²

Electrical	
Power Input	100 to 480 VAC, 50/60 Hz, auto-switching

Environmental	
Operating Temperature	-30 °C to 50 °C (-22° F to 122 °F)
Storage Temperature	-40 °C to 85 °C (-40 °F to 185 °F)
Humidity	95% relative humidity @ 40 °C (104 °F), non-condensing
Vibration	3.0 G at 2 Hz to 55 Hz for minimum of 100,000 cycles (all x, y, and z axis)
Ingress Protection	IP 66

LTE Modem	
LTE Bands Supported	B2, B4, B5, B12, B13, B14, B66, B71
Device Category	CAT-4 IoT
Carrier Device Certifications	AT&T, AT&T FirstNet, Verizon, Bell Mobility
SIM Card Size	Nano (12.3 mm × 8.8 mm × 0.67 mm; 0.48" × 0.35" × 0.03")

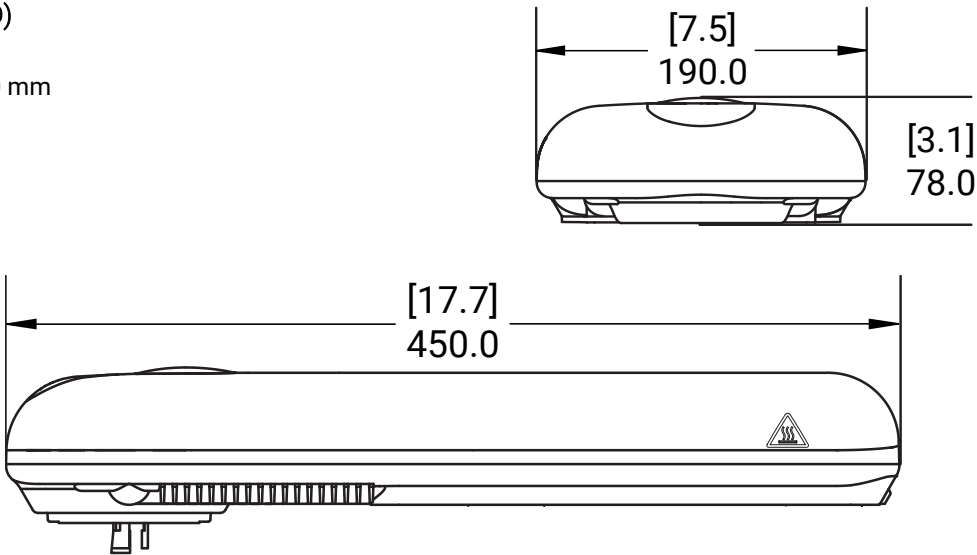
Supplied Accessories	
Streetlight Mount	Includes mounting clamp for 2" IPS poles and clamp inserts to accommodate 1 ¼" and 1 ½" IPS poles

Outline Dimensions

[X.X]	INCHES
X.X	MM

Streetlight-mounted ENVR2X

Dimensions (H × W × D)
 [3.1" × 7.5" × 17.7"]
 78 mm × 190 mm × 450 mm
 Weight
 6.12 kg [13.5 lbs]

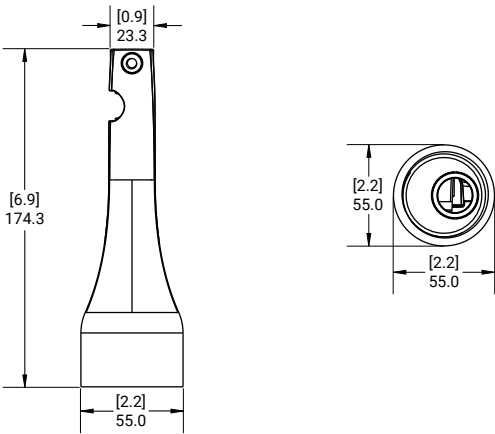


[X.X]	INCHES
X.X	MM

Mounting Accessory Outline Dimensions

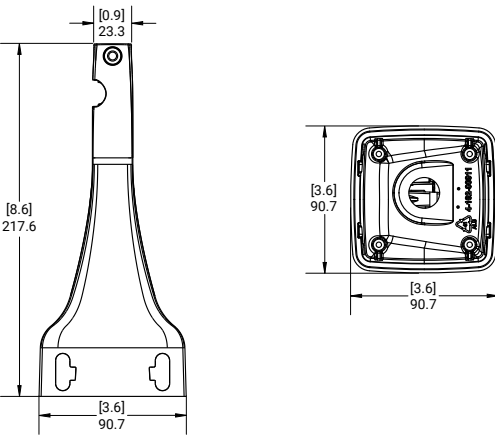
Universal NPT Camera Bracket Mount

Dimensions (H x W x D)
 [6.9" x 2.2" x 2.2"]
 174.3 mm x 55 mm x 55 mm
 Weight
 0.14 kg (0.3 lbs)



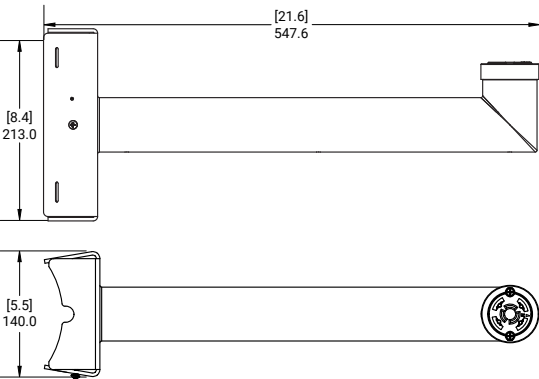
Integrated Junction Box Mount (for L6A Enterprise LPR Camera)

Dimensions (H x W x D)
 [8.6" x 3.6" x 3.6"]
 217.6 mm x 90.7 mm x 90.7 mm
 Weight
 0.8 kg (0.36 lbs)



NEMA Pole Arm Mount

Dimensions (H x W x D)
 [8.4" x 5.5" x 21.6"]
 213.0 mm x 140.0 mm x 547.6 mm
 Weight
 1.8 kg (4.0 lbs)



Ordering Information

Part Number	
ENVR2X-RGD-STREETLIGHT-MOUNT-4TB-NO-SIM	Street Light Mounted 4 TB ENVR2X Rugged (no SIM card included)

Unity Video 8 - Software Licenses	
UNITY8-ENT	Avigilon Unity Video 8 Enterprise Edition license
UNITY8-STD	Avigilon Unity Video 8 Standard Edition license
UNITY8-COR	Avigilon Unity Video 8 Core Edition license
UNITY8-FACE	Avigilon Unity Video 8 Facial Recognition feature channel license
UNITY8-FACE-10	Avigilon Unity Video 8 Facial Recognition feature 10 channel license
UNITY8-VFD-1YR	Avigilon Unity Video 8 Visible Firearm Detection channel subscription license. VFD is currently only available in the United States. The license is not available on eCommerce and must be ordered manually through Customer Order Management.
UNITY8-POS-STR	Unity Point of Sale stream

Accessories	Description	Weight	EPA
ENVR2X-RGD-UNIV-CAM-BRKT	Universal NPT Camera Bracket Mount	0.3 lbs (0.14 kg)	0.07 ft²
ENVR2X-RGD-L6A-CAM-BRKT	Integrated Junction Box Mount (for L6A Enterprise LPR Camera)	0.8 lbs (0.36 kg)	0.1 ft²
ENVR2X-RGD-MNTING-ARM	NEMA Pole Arm Mount	4.0 lbs (1.8 kg)	0.48 ft²
ENVR2X-SFP-TRAN-SHORT-MMF	SFP Transceiver, Short range 550 m, 850 nm		
ENVR2X-SFP-TRAN-LONG-SMF	SFP Transceiver, Long range 10 km, 1310 nm		
ENVR2X-RGD-DPY-PC-NA	7-pin NEMA to NEMA 5-15P 3-prong male plug		

Installers are responsible for verifying the available accessory load (weight and Effective Projected Area - EPA) for their specific installation location. Failure to perform this calculation could result in an overloaded pole system and subsequent damage to the ENVR2X.

Support

For product support, visit: motorolasolutions.com



Motorola Solutions, Inc. 500 West Monroe Street, Chicago, IL 60661 U.S.A. motorolasolutions.com

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