Advanced Video Security in Mini Form Factors for Any Space

Overview

Verkada's Mini Series offers flexible, discreet cameras with exceptional image quality. It includes four indoor models (the CM22, CM42, CM41-S, and CM42-S) and one outdoor model (the CM41-E). These cameras are suitable for a variety of applications, from corporate offices and retail locations to banks and schools.

The CM22 provides essential video security features in a compact form. It is a 3MP camera with 10 meters of IR Range, and includes people and vehicle detection for motion search and trajectory analysis.

The CM42 is a compact and powerful camera that offers many core benefits found in our Dome Series cameras. It surpasses its predecessor in image quality and analytics performance with a cutting-edge Sony IMX675 image sensor, increased storage capacity and advanced Ambarella CV25S88 system on a chip (SOC). It meets EN 50155 railway compliance standards and can be installed for transportation security on trains, buses and boats.

The CM41-E is ideal for outdoor installations and exposure to the elements, thanks to its IK10, IP67 and IP6K9K ratings that provide additional resistance against external impacts and high-pressure water.

The CM41-S and CM42-S are our most compact and flexible cameras because their image sensors are separate from their main units. These cameras can fit in small and narrow places like ATMs, between walls, or in spaces where other cameras with similar capabilities cannot be installed.

All Mini Series cameras come equipped with essential features such as data encryption, onboard storage and advanced motion-based insights. These features enable organizations to easily scale their security coverage and enhance situational awareness across multiple locations. Additionally, the CM42, CM41-E, CM41-S, and CM42-S possess powerful edge-based processing capabilities that offer advanced computer vision functionalities, including Verkada's AI-powered search.

Key features

Coverage

- Bring clarity to investigations with 3MP+, high-definition sensor resolutions
- Effortlessly uncover in-scene details with enhanced digital zoom

Storage and processing

- 128GB-2TB of onboard storage
- Powered by an Ambarella chipset to support Verkada's edge-based video analytics
- Low-bandwidth impact, only using 20–50 kbps per camera at rest

Certifications

- IP67 weather rated outdoor models
- IK10 impact rated outdoor models
- IK08 impact rated indoor models
- NDAA compliant

Verkada's hybrid cloud architecture

No NVR or DVRs
Industrial–grade onboard storage saves up to 365 days of continuous video[1]

Easy to scale
Bandwidth friendly and supports thousands of cameras across unlimited locations

Centralized management
Modern platform enables secure access on any device from anywhere in the world

The Reliability of Onboard Storage, With the Accessibility of the Cloud

Simple to install
- No NVRs, DVRs, or servers—just a PoE connection
- Cameras come online and configure in minutes
- No added software or complexities like port forwarding

Easy to use
- Centralized management for secure remote access on any device nearly anywhere
- No training required to access footage and features
- Find, download and share footage from any device

Advantages of cloud–managed solution
- Real–time alerts if cameras fall offline
- SAML–based integration with single–sign on (SSO) solutions
- Continuous updates with new AI features
- Instantly share live footage via SMS and email
- Live, proactive alerting based on unusual activity

Ready for scale
- Bandwidth–friendly, operating at just 20–50 kbps
- Scale to thousands of cameras per location
- No added equipment needed to support additional cameras

No hidden costs
- Hardware includes up to a 10-year warranty
- Automatic firmware updates keep systems secure
- New features and enhancements are added at no additional costs

1. All our cameras record in "adaptive quality," capturing both standard and high quality streams. Standard quality (SQ) video is stored up to the amount of retention specified by the customer. The amount of high quality video stored on the camera will depend on the amount of motion detected by the camera over time. To learn more, visit our website: https://docs.verkada.com/docs/adaptive-quality-recording-whitepaper.pdf

Verkada's AI-Powered Search
Use Natural Language to Conduct Investigations and Create Alerts Directly Relevant to Your Organization
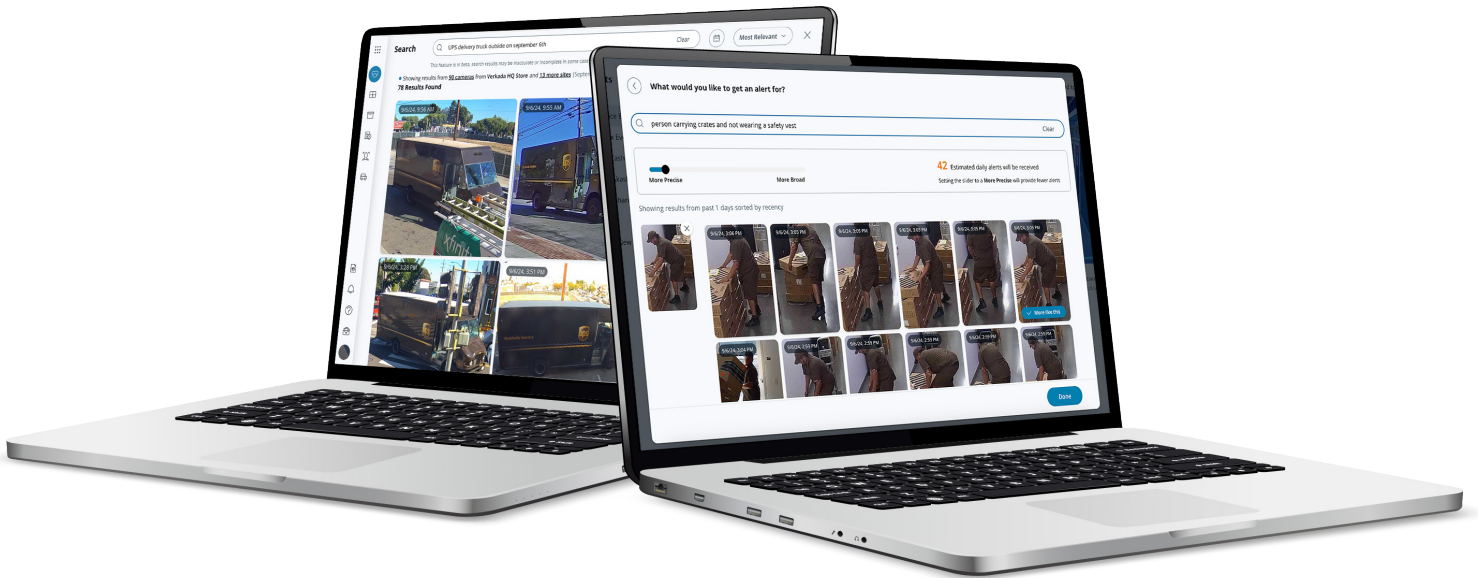
Verkada's AI-powered search in Command gives users the ability to search and create real-time alerts for a near-limitless number of attributes of people and vehicles across their organization. With AI-powered search, users can leverage their own words in a freeform search bar to describe a person or vehicle of interest and conduct highly-granular investigations as a result.

Tap into AI to unlock nearly unlimited search criteria

- A high-performance text-to-image open source AI model and our own in-house enhancements turn the Command search bar into a blank canvas for freeform text queries– allowing users to conduct investigations into specific, granular attributes of people and vehicles.

Structure detailed queries beyond the norm

- Search for specific attributes like articles of clothing, apparel, brands, and more, to drill-down into more granular attributes of people that can make investigations more accurate and streamlined.
- Identify vehicles of interest with detailed criteria like tinted windows, spoilers, bumper stickers, text (like "UPS truck" or "San Mateo School Bus") and more, to quickly detect vehicles pertinent to one's investigation.

Conduct investigations that address different industry-specific use cases by time and location[1]

- Better investigate slip-and-fall cases, shoplifting, break-ins, occupational hazards, workplace safety compliance and more, using freeform queries.
- Organize searches by time and location for added specificity and more relevant insights of people and vehicles.
- Use "NOT," "AND," and "OR" in your queries to search for multiple identifying attributes or for missing attributes (e.g., "Person driving a forklift and wearing a safety vest, but not a hardhat").

Create proactive alerts using freeform text queries

- Turn queries into action with AI-powered alerts and generate notifications directly relevant to one's security and operational needs.
- Adjust the frequency of alerts with a slider that tailors the accuracy of results.
- Share alerts in real-time and use the "More like this" feature to generate even more specific results from one's queries.

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1. Check out our User Guide for example queries and methods for constructing your own queries relevant to your organization's requirements.

Verkada's People and Vehicle Analytics

Simplify Investigations with Intelligent People, Face and Vehicle Detection
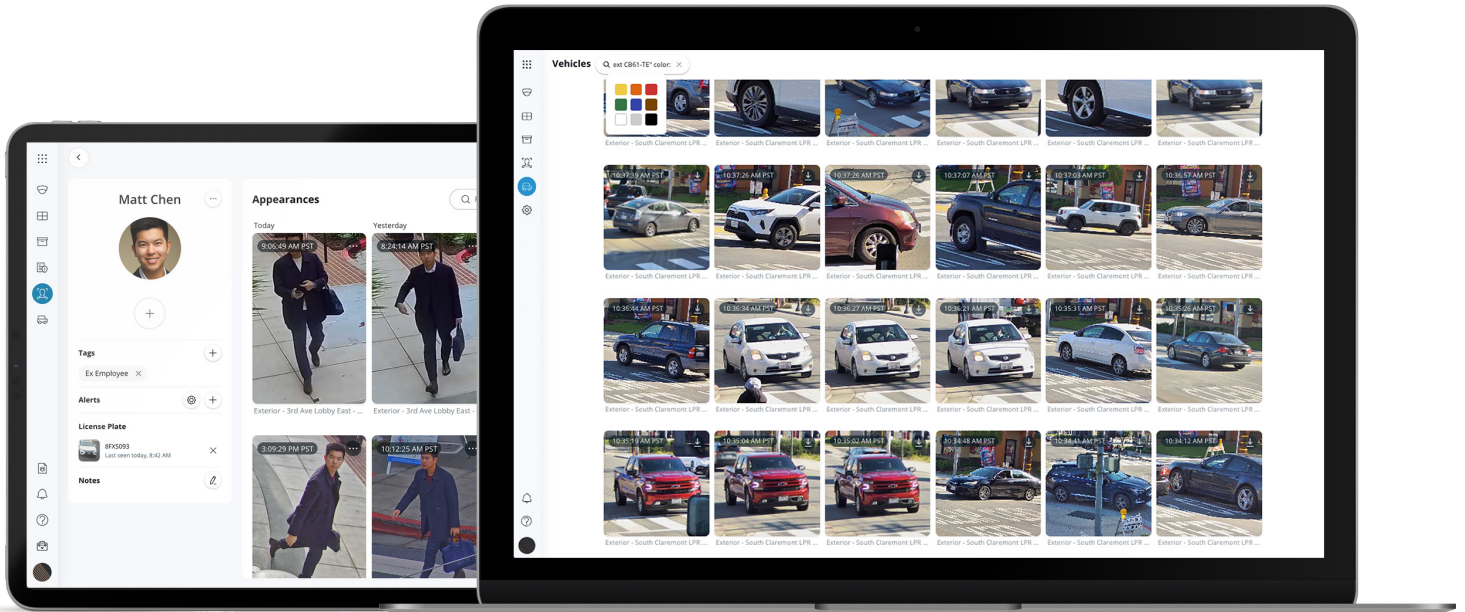
People and Vehicle Analytics combine intelligent edge-based video processing with computer vision to give users high-quality, cloud-based images of all individuals and vehicles identified in the scene. Using these analytics, customers can filter for specific attributes of people or vehicles (like clothing color or vehicle type) on a camera-by-camera basis.

Bring Intelligence to Investigations

Face search

- Quickly search for matching people by selecting an existing face from your organization or by uploading an image

Person and vehicle history

- Browse through high-resolution snapshots of people and vehicles detected
- Save snapshots or easily access associated full–res video
- Search for matched people and vehicles across your entire organization with cross–camera search

Attribute filters

- Drill-down into specific cameras to filter for people and vehicles based on a range of attributes, including clothing or vehicle color, gender appearance, vehicle body type and facial matches

Person and License Plate of Interest notifications

- Create a Person of Interest using an uploaded photo or existing face in Command
- Capture a license plate of interest with our CB52-TE or CB62-TE Bullet cameras
- Set up proactive SMS/email alerts for when a matching face is detected by a camera
- Link License Plates of Interest to a Person of Interest

Enterprise Controlled Encryption (ECE)

Overview

Verkada encrypts video data at rest (i.e., on the user's device or on Verkada's cloud servers) and in transit (i.e., as data moves among devices and the cloud). ECE builds on this encryption framework by giving customers more control over their data encryption. Leveraging a well-recognized technique called client-side encryption, customers can choose to keep some keys to themselves, share them with Verkada if they need technical support, or with a third party for a variety of reasons, as outlined below. ECE improves on Verkada's already robust data protection measures–empowering customers with control over their data.

Customers must opt-in and enable ECE for their devices. ECE will not be enabled for customers by default. To opt-in, navigate to "Privacy & Security" under "Admin" settings. Click on "Enterprise Controlled Encryption" and complete all the steps.

An Added Layer of Protection	With ECE, decryption requires access to two keys: one key is on Verkada servers, while the other is stored with the customer's identity provider (e.g., Okta, Microsoft Entra ID, etc.) Both keys are required to decrypt certain data including most video history, so even if there is a breach at the identity provider or Verkada, the customer's data remains secure. ECE is, in short, an enhanced, robust security method for data storage and transfer, combining the existing secure decryption step on Verkada's servers with a second step on the customer's own devices.
Customers Control Key Access	ECE puts decryption keys directly in our customers' hands–allowing them to selectively share access on an as-needed basis. This flexibility allows customers to leverage the expertise of specialized services or comply with legal requirements, while maintaining control over their data.[1] ECE allows the customer to decide who gets access to data, for how long, and to what extent.

1. Using ECE, a customer might wish to share its decryption keys with third parties for a number of reasons. A customer can allow a cybersecurity firm to conduct a safety audit to analyze video data without having permanent device access. During a time-sensitive investigation, a customer can additionally provide specific keys to law enforcement to grant access to relevant footage without exposing their entire video archive. A customer can, moreover, use a transcoding service to change the format of video or employ translation services and grant the service provider limited, task-specific access to data.

Gain Insights Into How Spaces are Used with Multi-Camera Occupancy Trends

Verkada's Occupancy Trends dashboard is a powerful tool that gives users insight into how their physical space is used. Customers can aggregate data across multiple camera feeds, providing a comprehensive view of foot and vehicle traffic patterns throughout an area.

The dashboard allows users to:

- Analyze real-time and historical occupancy data for both people and vehicles.
- Monitor trends over various timeframes (daily, weekly, monthly, or a custom date range).
- Identify peak occupancy periods and underutilized areas for both foot and vehicle traffic.
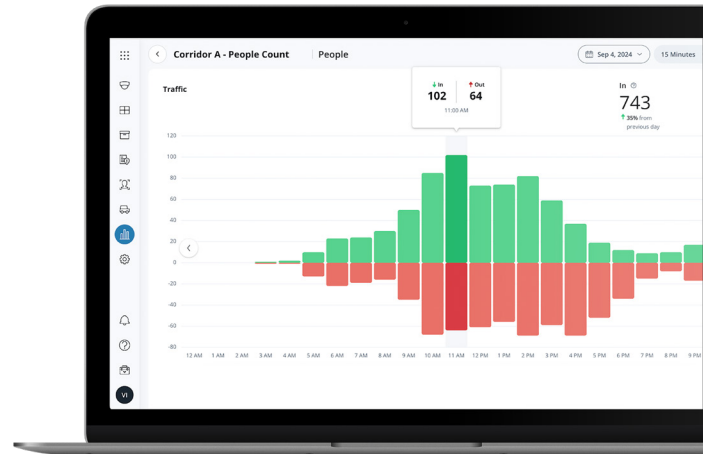
Actionable insights to inform key operational decisions

Use Verkada's Occupancy Trends dashboard to boost efficiency and gain actionable insights in key areas across your organization:

- **Staffing optimization**
  Allocate staff based on real-time occupancy needs, considering both foot and vehicle traffic patterns.
- Inventory management
  Anticipate demand and optimize inventory levels based on traffic patterns in storage areas and loading zones.
- Energy efficiency
  Identify underutilized spaces for potential HVAC adjustments based on combined foot and vehicle traffic.
- Improved traffic flow
  Analyze vehicle traffic patterns to identify bottlenecks and congestion points, optimizing traffic flow through signage or delivery schedule adjustments.

Operational benefits across diverse industries

Retail: Optimize product placement, predict peak traffic periods (foot and vehicle), and analyze sales conversion rates.

Manufacturing: Improve production line workflows, identify bottlenecks, and optimize warehouse safety by monitoring foot and vehicle traffic patterns.

Healthcare: Enhance patient experience by proactively allocating resources based on real-time space usage, including foot traffic, ambulance arrivals, and parking lot activity.

Education: Support student safety and optimize class scheduling by understanding student movement patterns (foot and vehicle traffic around drop-off and pick-up zones).

Real Estate: Dynamically adjust HVAC usage based on foot traffic in one's building, repurpose underutilized spaces, and make data-driven space planning decisions.

Customization and collaboration

The Occupancy Trends dashboard can be customized to customers' specific needs. It is also easy to add other individuals in an organization to view the same dashboard–facilitating easy collaboration among building managers, EHS officers, and frontline staff.

Maximizing value with two key views[1]

1. Summary view

See the total number, peak number, and current number of net people and vehicle occupants in and around your premises at specified time periods. This view allows users to compare occupancy levels across different locations.

2. Detailed view

The detailed view consists of two charts: "Traffic" and "Net Cumulative Occupancy." The "Traffic" chart shows in/out patterns over a specified time period (e.g., day, week, month, or a custom range). The "Traffic" dashboard also shows any increases or decreases in occupancy over time.

The "Net Cumulative Occupancy" shows the rolling cumulative net (in/out) occupancy from the point in time when the user resets the count. Customers can also use this view to identify when "in" occupancy peaked and hit low points.

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1. For details on how to create and interpret Occupancy Trends dashboards, read our user guide here.

Mini series model comparison

	CM22	CM42	CM41-E	CM41-S	CM42-S
Type	Indoor Mini Dome	Indoor Mini Dome	Outdoor Mini Dome	Split Mini Dome	Split Mini Dome
Starting price (MSRP)	$499	$699	$999	$999	$999
Warranty	5 years	10 years	10 years	10 years	10 years
Image sensor	3 MP	5 MP	5 MP	5 MP	5 MP
IR range	10m / 33ft	20m / 66ft	15m / 49ft	N/A	15m / 49ft
Audio support		✓	✓		✓
People Analytics					
People detection (motion search, trajectory analysis)	✓	✓	✓	✓	✓
People Analytics (People search, attribute search, face search, Occupancy Trends, AI-powered search)		✓	✓	✓	✓
Vehicle Analytics					
Vehicle Detection (Motion search, trajectory analysis)	✓	✓	✓	✓	✓
Vehicle Analytics (vehicle search, attribute search, Occupancy Trends, AI-powered search)		✓	✓	✓	✓

CM22
Tech Specs

Camera features

Image Sensor	1 / 2.8" Progressive CMOS	**Shutter Speed**	1 / 30 sec. to 1 / 10,000 sec.
Sensor Resolution[1]	3MP (2048 x 1536)	**Day/Night**	IR-cut filter for day and night function
Lens Type	Fixed	**IR Cut Filter**	Yes
Focal Length	2.8mm	**IR Range**	10m / 33ft
Aperture	F1.6	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	Fixed	**Onboard Storage**	Capacity: From 256GB to 768GB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 95° (79°) Vertical: 69° (62°) Diagonal: 130° (96°)	**CPU**	Ambarella CV25S88
Sensor Movement	Tilt: 60° Pan: 350° Rotation: 180°		

Standard video settings

Compression	H.265, H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[3]	24fps	**Live Streaming Settings**	High quality (HQ): Up to 3,000 Kbps (default) Standard quality (SQ): Up to 600 Kbps
WDR Technology	104 dB dynamic range, true WDR, dual exposure		

Standard audio settings

Audio	Not supported

Power and network

Power Input[4]	With IR: IEEE 802.3af Type 1 PoE Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: N/A	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 / 1000 Mbps
Power Consumption[4]	With IR: 37-57V, 0.165-0.107A, 6.12W Without IR: 37-57V, 0.086-0.056A, 3.21W Extended temperature range: N/A	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: No

1. All our cameras record in "adaptive quality," capturing both standard (SQ) and high quality (HQ) streams. SQ video is stored up to the amount of retention specified by the customer. The amount of HQ video stored on the camera will depend on the amount of motion detected by the camera over time. To learn more, visit our website: https://docs.verkada.com/docs/adaptive-quality-recording-whitepaper.pdf
2. Lens Distortion Correction (LDC) crops the sensor field of view to deliver a rectified, undistorted output image.
3. Frame rate can be adjusted by support.
4. Extended temperature range includes operating temperatures below -8.5°C / 16.7°F and assumes IR will be enabled.

CM22
Tech Specs

General

Operating Temperature	-10°C to 50°C / 14°F to 122°F	**LED Indicator**	System power and status indicator
Humidity	0 to 90%	**Warranty**	5 Years
Certifications	FCC, ICES, RCM, VCCI, CE, UKCA, EN 50155 railway compliance, UL/cUL/IEC 62368-1, NOM	**Included Accessories**	Setup guide, T10 security torx screwdriver, 3x wingnuts, 3x washers, 3x TP4.0 mount screws, 3x M4 wall screws, 3x wall anchors

Mechanical

Weight	Camera: 290g / 10.23oz Mount plate: 98g / 3.46oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 124.5mm / 4.9in, H: 71.5mm / 2.8in		

Software capabilities

Alerts	Camera status, motion detection, people detection, vehicle detection, crowd detection, line-crossing detection, loitering detection	**Streaming and Storage**	Cloud backup, configurable retention days, selectable storage location, low bandwidth mode, timelapse, RTSP
People Analytics	Motion search, trajectory analysis	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Motion search, trajectory analysis		

CM42
Tech Specs

Camera features

Image Sensor	1 / 2.8" Progressive CMOS	**Shutter Speed**	1 / 30 sec. to 1 / 10,000 sec.
Sensor Resolution[1]	5MP (2592 x 1944)	**Day/Night**	IR-cut filter for day and night function
Lens Type	Fixed	**IR Cut Filter**	Yes
Focal Length	2.8mm	**IR Range**	20m / 66ft
Aperture	F1.6	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	Fixed	**Onboard Storage**	Capacity: From 256GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2]**)**	Horizontal: 95° (79°) Vertical: 69° (62°) Diagonal: 130° (96°)	**CPU**	Ambarella CV25S88
Sensor Movement	Tilt: 60° Pan: 350° Rotation: 180°		

Standard video settings

Compression	H.265, H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[3]	24fps	**Live Streaming Settings**	High quality (HQ): Up to 3,000 Kbps (default) Standard quality (SQ): Up to 600 Kbps
WDR Technology	104 dB dynamic range, true WDR, dual exposure		

Standard audio settings

Audio	Supported	**Interface**	Built-in microphone
Audio Capacity	One-way audio	**Effective Range**	5m / 15ft

Power and network

Power Input[4]	With IR: IEEE 802.3af Type 1 PoE Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: N/A	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 / 1000 Mbps
Power Consumption[4]	With IR: 37-57V, 0.165-0.107A, 6.12W Without IR: 37-57V, 0.086-0.056A, 3.21W Extended temperature range: N/A	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: Yes

1. All our cameras record in "adaptive quality," capturing both standard (SQ) and high quality (HQ) streams. SQ video is stored up to the amount of retention specified by the customer. The amount of HQ video stored on the camera will depend on the amount of motion detected by the camera over time. To learn more, visit our website: https://docs.verkada.com/docs/adaptive-quality-recording-whitepaper.pdf
2. Lens Distortion Correction (LDC) crops the sensor field of view to deliver a rectified, undistorted output image.
3. Frame rate can be adjusted by support.
4. Extended temperature range includes operating temperatures below -8.5°C / 16.7°F and assumes IR will be enabled.

Tech Specs

General

Operating Temperature	-10°C to 50°C / 14°F to 122°F	**LED Indicator**	System power and status indicator
Humidity	0 to 90%	**Warranty**	10 Years
Certifications	FCC, ICES, RCM, VCCI, CE, UKCA, EN 50155 railway compliance, UL/cUL/IEC 62368-1, NOM, IK08 impact rating	**Included Accessories**	Setup guide, T10 security torx screwdriver, 3x wingnuts, 3x washers, 3x TP4.0 mount screws, 3x M4 wall screws, 3x wall anchors

Mechanical

Weight	Camera: 290g / 10.23oz Mount plate: 98g / 3.46oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 124.5mm / 4.9in, H: 71.5mm / 2.8in		

Software capabilities

Alerts	Camera status, motion detection, people detection, vehicle detection, Person of Interest detection, crowd detection, line-crossing detection, loitering detection	**Streaming and Storage**	Cloud backup, configurable retention days, selectable storage location, low bandwidth mode, timelapse, RTSP
People Analytics	People search, attribute search, face search, Occupancy Trends, motion search, trajectory analysis, selective face blurring, AI-powered search[5]	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends, AI-powered search[5]		

5. AI-powered search is currently supported in English only.

CM41-E
Tech Specs

Camera features

Image Sensor	1 / 2.8" Progressive CMOS	**Shutter Speed**	1 / 30 sec. to 1 / 10,000 sec.
Sensor Resolution[1]	5MP (2688 x 1944)	**Day/Night**	IR-cut filter for day and night function
Lens Type	Fixed	**IR Cut Filter**	Yes
Focal Length	2.8mm	**IR Range**	15m / 49ft
Aperture	F1.6	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	Fixed	**Onboard Storage**	Capacity: From 128GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 97° (78°) Vertical: 71° (63°) Diagonal: 128° (91°)	**CPU**	Ambarella S5L63
Sensor Movement	Tilt: 70° Pan: 355° Rotation: 240°		

Standard video settings

Compression	H.265, H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[3]	24fps	**Live Streaming Settings**	High quality (HQ): 1,000 - 4,500 Kbps (1,500 Kbps default) Standard quality (SQ): 600 Kbps

Standard audio settings

Audio	Supported	**Interface**	Built-in microphone
Audio Capacity	One-way audio	**Effective Range**	5m / 15ft

Power and network

Power Input[4]	With IR: IEEE 802.3af Type 1 PoE Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: IEEE 802.3af Type 1 PoE	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10/100 Mbps
Power Consumption[4]	With IR: 37-57V, 0.14-0.09A, 5.46W Without IR: 37-57V, 0.08-0.05A, 3.22W Extended temperature range: 37-57V, 0.27-0.17A, 10.1W	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: Yes

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2. Lens Distortion Correction (LDC) crops the sensor field of view to deliver a rectified, undistorted output image.
3. Frame rate can be adjusted by support.
4. Extended temperature range includes operating temperatures below -8.5°C / 16.7°F and assumes IR will be enabled.

Tech Specs

General

Operating Temperature	-40°C to 55°C / -40°F to 131°F	**LED Indicator**	System power and status indicator
Humidity	0 to 90%	**Warranty**	10 Years
Certifications	FCC, ICES, CE, UL, CB, BIS, NOM, VCCI, IP67 weather rating, IP6K9K, IK10 impact rating, IEC 60950, IEC 62368, NDAA, EN 50155 railway compliance, EN 45545 railway fire compliance, EN 50121 railway EMC compliance	**Included Accessories**	Setup guide, T10 security torx screwdriver, wall mount screws (3x), junction box screws (2x), mounting template, desiccant bags, cable sealing components

Mechanical

Weight	Camera: 401g / 14.14oz Mount plate: 138g / 4.87oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 121mm / 4.78in, H: 72mm / 2.83in		

Software capabilities

Alerts	Camera status, motion detection, people detection, vehicle detection, Person of Interest detection, crowd detection	**Streaming and Storage**	Cloud backup, configurable retention days, selectable storage location, low bandwidth mode, timelapse, RTSP
People Analytics	People search, attribute search, face search, Occupancy Trends, motion search, trajectory analysis, selective face blurring, AI-powered search[5]	**Sharing and Privacy**	Live link, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, AI-powered search[5]		

5. AI-powered search is currently supported in English only.

CM41-S Mini Split
Tech Specs

Camera features

Image Sensor	1 / 2.8" Progressive CMOS	**Shutter Speed**	1 / 30 sec. to 1 / 10,000 sec.
Sensor Resolution[1]	5MP (2688 x 1944)	**Day/Night**	IR-cut filter for day and night function
Lens Type	Fixed	**IR Cut Filter**	Yes
Focal Length	2.8mm	**IR Range**	N/A
Aperture	F1.6	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	Fixed	**Onboard Storage**	Capacity: From 128GB to 384GB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 97° (78°) Vertical: 71° (63°) Diagonal: 128° (91°)	**CPU**	Ambarella S5L63
Sensor Movement	Tilt: 90° Pan: N/A Rotation: 240°		

Standard video settings

Compression	H.265, H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[3]	24fps	**Live Streaming Settings**	High quality (HQ): Up to 3,000 Kbps (default) Standard quality (SQ): Up to 600 Kbps

Standard audio settings

Audio	Not Supported

Power and network

Power Input[4]	With IR: N/A Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: N/A	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10/100 Mbps
Power Consumption[4]	With IR: N/A Without IR: 37-57V, 0.1-0.06A, 3.55W Extended temperature range: N/A	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: No

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2. Lens Distortion Correction (LDC) crops the sensor field of view to deliver a rectified, undistorted output image.
3. Frame rate can be adjusted by support.
4. Extended temperature range includes operating temperatures below -8.5°C / 16.7°F and assumes IR will be enabled.

CM41-S Mini Split
Tech Specs

General

Operating Temperature	-10°C to 50°C / 14°F to 122°F	**LED Indicator**	System power and status indicator
Humidity	0 to 90%	**Warranty**	10 Years
Certifications	FCC, ICES, CE, UL, CB, NOM	**Included Accessories**	Setup guide, mounting template, camera mounting screws (2x), hub mounting screws (2x)

Mechanical

Weight	Camera: 199g / 7.02oz Mount plate: 55g / 1.94oz	**Body**	Aluminum, plastic housing
Dimensions	Camera Head: H: 47.90mm / 1.89in, W: 55.22mm / 2.17in, D: 35.22mm / 1.39in Base: Ø: 94.18mm / 3.70in, H: 27.64mm / 1.09in		

Software capabilities

Alerts	Camera status, motion detection, people detection, vehicle detection, Person of Interest detection, crowd detection	**Streaming and Storage**	Cloud backup, configurable retention days, selectable storage location, low bandwidth mode, timelapse, RTSP
People Analytics	People search, attribute search, face search, Occupancy Trends, motion search, trajectory analysis, selective face blurring, AI-powered search[5]	**Sharing and Privacy**	Live Link, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, AI-powered search[5]		

5. AI-powered search is currently supported in English only.

CM42-S Mini Split
Tech Specs

Camera features

Image Sensor	1 / 2.8" Progressive CMOS	**Shutter Speed**	1 / 30 sec. to 1 / 10,000 sec.
Sensor Resolution[1]	5MP (2592 x 1944)	**Day/Night**	IR-cut filter for day and night function
Lens Type	Fixed	**IR Cut Filter**	Yes
Focal Length	3.2mm	**IR Range**	15m / 49ft
Aperture	F1.6	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	Fixed	**Onboard Storage**	Capacity: From 256GB, 768GB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 99° (80°) Vertical: 71° (63°) Diagonal: 107° (92°)	**CPU**	Ambarella CV25S88
Inputs/Ouputs	3.5mm audio input, micro-HDMI output, +/- AUX[4] with 12V / 4W power output, USB-C sensor input [3]		

Standard video settings

Compression	H.265, H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[5]	24fps	**Live Streaming Settings**	High quality (HQ): Up to 3,000 Kbps (default) Standard quality (SQ): Up to 600 Kbps
WDR Technology	104 dB dynamic range, true WDR, dual exposure		

Standard audio settings

Audio	Supported	**Interface**	3.5mm audio input
Audio Capacity	One-way audio		

Power and network

Power Input[6]	With IR: IEEE 802.3af Type 1 PoE Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: N/A	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 / 1000 Mbps
Power Consumption[6]	With IR: 37 - 57V, 0.12 - 0.19A, 7.25W Without IR: 37 - 57V, 0.08 - 0.12A, 4.3W Extended temperature range: N/A	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: Yes

1. All our cameras record in "adaptive quality," capturing both standard (SQ) and high quality (HQ) streams. SQ video is stored up to the amount of retention specified by the customer. The amount of HQ video stored on the camera will depend on the amount of motion detected by the camera over time. To learn more, visit our website: https://docs.verkada.com/docs/adaptive-quality-recording-whitepaper.pdf
2. Lens Distortion Correction (LDC) crops the sensor field of view to deliver a rectified, undistorted output image.
3. Should the customer choose to use their own USB-C cable, it must be USB-C 3.1 (or higher) speed rated.
4. +/- Aux not currently supported. Support is forthcoming.
5. Frame rate can be adjusted by support.
6. Extended temperature range includes operating temperatures below -8.5°C / 16.7°F and assumes IR will be enabled.
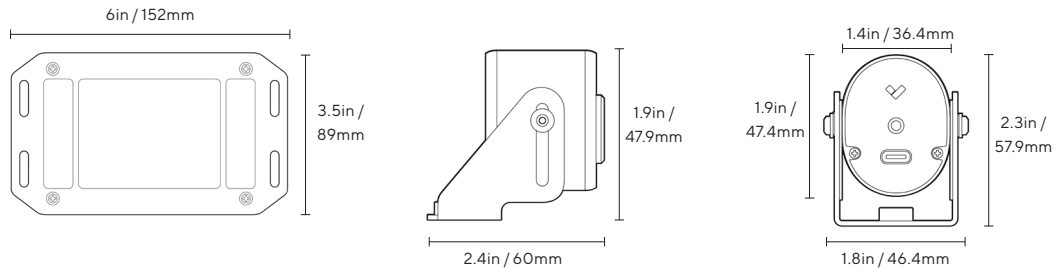
CM42-S Mini Split
Tech Specs

General

Operating Temperature	-10°C to 50°C / 14°F to 122°F	**LED Indicator**	System power and status indicator
Humidity	0 to 90%	**Warranty**	10 Years
Included Accessories	T10 security torx screwdriver, 1x 1/4"-20 screw, 4x wall screws, 4x wall anchors, 1x 2m USB-C cable, double-sided tape for wall mounting main unit and sensor unit mount bracket	**Certifications**	FCC, IC

Mechanical

Weight	Camera Main Unit: 242.8g / 8.6oz Camera Sensor Unit: 110.2g / 3.9oz USB-C Cable: 79.9g / 2.8oz	**Body**	Aluminum, plastic
Dimensions[7]	Camera Sensor Unit: H: 47.4mm / 1.9in, W: 36.4mm / 1.4in, L: 40.2mm / 1.6in Camera Main Unit: H: 25.5mm / 1.0 in, W: 89.0mm / 3.5in, L: 152.0mm / 6.0in		

Dimensions

6in / 152mm · 3.5in / 89mm · 1.9in / 47.9mm · 2.4in / 60mm · 1.4in / 36.4mm · 1.9in / 47.4mm · 2.3in / 57.9mm · 1.8in / 46.4mm

Software capabilities

Alerts	Camera status, motion detection, people detection, vehicle detection, Person of Interest detection, crowd detection, line-crossing detection, loitering detection, AI-powered alerts	**Streaming and Storage**	Cloud backup, configurable retention days, selectable storage location, low bandwidth mode, timelapse, RTSP
People Analytics	People search, attribute search, face search, Occupancy Trends, motion search, trajectory analysis, selective face blurring, AI-powered search	**Sharing and Privacy**	Live links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends, AI-powered search		

7. Mechanical dimensions listed here represent the sensor unit without the bracket attached.

Professional video monitoring
Stop Crimes in Progress

Verkada's professional video monitoring solution enables organizations to detect and respond to threats as they happen, using only their cameras.

Turn your cameras into a monitored alarm system

Professional video monitoring allows organizations to turn their Verkada cameras into a complete, monitored alarm solution - no extra hardware required. Simply select which cameras should be monitored, set an arm/disarm schedule and choose how monitoring agents should respond to a threat, such as remote talk down or notifying police.

How it works

Detect unusual activity

- Choose which cameras should be monitored and when. An alarm is triggered if a person is detected while the system is armed.
- Other Verkada devices, including intrusion sensors, access control and environmental sensors, can also be configured as alarm triggers.

Assess the threat

- Monitoring agents immediately review camera footage to determine if a person is actually present.*
- Video-verification helps to ensure priority police response and screens out false alarms.

Take action

- If there is a person present, the monitoring agent will immediately notify your call list.
- Agents can also request emergency dispatch or talk down to intruders through an on-site speaker.
- If there is not a person present, the agent will dismiss the incident.

Key benefits

Detect intruders before they enter your building

Protect your perimeter with cameras that can detect intruders the minute they set foot on your property.

No alarm panel or sensors needed

Use cameras as intrusion sensors and get all the benefits of a monitored alarm system without any extra hardware.

Cut back on expensive in-person guards

Cameras detect intruders and agents can take action, reducing the need for live guards patrolling or watching cameras.

Help get priority police response

Video-verified alarms help the police know that they should respond quickly and helps you avoid false alarm fines.

Take action against intruders immediately

In addition to notifying law enforcement, our agents can talk down to intruders through a powerful speaker to scare them off.

*Professional monitoring with video verification is included in the LIC-BA Standard Alarm License or the LIC-BV Premium Alarm License. One License is required per location, and includes up to 50 monitored cameras. Monitoring is provided by fully redundant, US-based, UL-listed central monitoring stations with Five Diamond Certification from The Monitoring Association. Certified monitoring centers are also available in Canada, the UK and Australia.

Ordering Information

Mini Series pricing

Model Number	MP[1]	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention[1]	People/ Vehicle Analytics	Cost (MSRP) USD
CM22-256-HW	3.0MP	✓	Fixed	10m / 33ft	256GB	30 Days	–	$499
CM22-512-HW	3.0MP	✓	Fixed	10m / 33ft	512GB	60 Days	–	$899
CM22-768-HW	3.0MP	✓	Fixed	10m / 33ft	768GB	90 Days	–	$1,299
CM42-256-HW	5.0MP	✓	Fixed	20m / 66ft	256GB	30 Days	✓	$699
CM42-512-HW	5.0MP	✓	Fixed	20m / 66ft	512GB	60 Days	✓	$1,099
CM42-768-HW	5.0MP	✓	Fixed	20m / 66ft	768GB	90 Days	✓	$1,499
CM42-1TB-HW	5.0MP	✓	Fixed	20m / 66ft	1TB	120 Days	✓	$1,899
CM42-2TB-HW	5.0MP	✓	Fixed	20m / 66ft	2TB	365 Days	✓	$3,199
CM41-30S-HW	5.0MP	✓	Fixed	–	128GB	30 Days	✓	$999
CM41-90S-HW	5.0MP	✓	Fixed	–	384GB	90 Days	✓	$1,799
CM41-30E-HW	5.0MP	✓	Fixed	15m / 49ft	128GB	30 Days	✓	$999
CM41-60E-HW	5.0MP	✓	Fixed	15m / 49ft	256GB	60 Days	✓	$1,399
CM41-90E-HW	5.0MP	✓	Fixed	15m / 49ft	512GB	90 Days	✓	$1,799
CM41-365E-HW	5.0MP	✓	Fixed	15m / 49ft	2TB	365 Days	✓	$3,199
CM42-256S-HW	5.0 MP	✓	Fixed	15m / 49ft	256GB	30 Days	✓	$999
CM42-768S-HW	5.0 MP	✓	Fixed	15m / 49ft	768GB	90 Days	✓	$1,799

1. All our cameras record in "adaptive quality," capturing both standard and high quality streams. Standard quality (SQ) video is stored up to the amount of retention specified by the customer. The amount of high quality video stored on the camera will depend the amount of motion detected by the camera over time. To learn more, visit our website: https://docs.verkada.com/docs/adaptive-quality-recording-whitepaper.pdf

Ordering Information

Video Security Cloud License pricing

Model Number	Description	Cost (MSRP) USD
LIC-CAM-1Y	1–Year Camera License	$199
LIC-CAM-3Y	3–Year Camera License	$549
LIC-CAM-5Y	5–Year Camera License	$899
LIC-CAM-10Y	10–Year Camera License	$1,799

Accessories pricing

ACC-MNT-MPEND-1	Mini Camera Pendant Cap Mount	$79
ACC-MNT-MJBOX-1	Mini Camera Junction Box Mount	$79
INJ-POE-PLUS	PoE Plus (802.3at) Injector, GigE	$129
ACC-MNT-CLIP-1	Tile Clip Mount	$99
ACC-MNT-SJBOX-1	Square Junction Box Mount [1]	$89

Viewing Station pricing

VX52-HW	VX52 Viewing Station	$499
LIC-VX-1Y	1–Year Viewing Station License	$499
LIC-VX-3Y	3–Year Viewing Station License	$1,299
LIC-VX-5Y	5–Year Viewing Station License	$1,999
LIC-VX-10Y	10–Year Viewing Station License	$3,999

1. Note: to mount Mini cameras with the ACC-MNT-SJBOX-1, one would need to pair it with the ACC-MNT-MJBOX-1.