

# 4 Independent Cameras From a Single Install Point



#### Overview

Verkada's CH52-E multisensor camera features four camera heads, providing unrivaled coverage from a single install point. The four 5MP sensors collectively capture 20MP of resolution. Each camera head can be repositioned and each lens can be zoomed up to 2.5x, allowing for comprehensive coverage while maintaining image detail. Each camera head is powered by a dedicated computer vision processor to provide the image quality, stability and analytics performance of four independent cameras.

The CH52-E is built to withstand extreme conditions. Sealed interior components have full IP66 rated protection against dust particles and heavy rain. The robust exterior housing provides IK10 rated protection against direct impacts from vandals, hail and flying debris. Like all Verkada cameras, the CH52-E works out-of-the-box without any additional configurations. The CH52-E only requires a single PoE++ network port, making it the most efficient choice for scaling coverage while minimizing cable runs and port use.

### Key features

#### Coverage

- 4 x 5MP image sensors to capture every detail
- 2.5x motorized zoom
- 30m / 98ft IR illuminators for nighttime visibility
- Individually adjustable and repositionable heads

#### Storage and processing

- 1TB-8TB of onboard storage
- Up to 365 days of retention in standard quality
- Four next generation computer vision processors for edge analytics
- Low-bandwidth impact, only using 80-200 kbps (20-50 kbps per head)
- Edge processing for motion, people and vehicle analytics

#### Certifications

- IK10 impact rating
- IP66 weather rating
- NDAA compliant

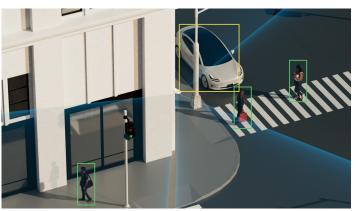


# Key use cases



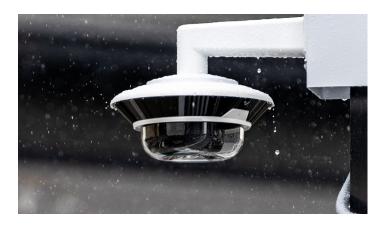
Interiors

Offices, hotel lobbies, retail centers, grocery stores, manufacturing floors, stadiums



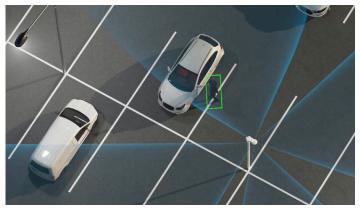
Intersections

Roadways, hallways, warehouse traffic monitoring



Corners

Campuses, airports, police departments, building exteriors



Open spaces

Garages, car dealerships, parking lots, parks



#### Verkada's hybrid cloud architecture



#### No NVR or DVRs

Industrial-grade onboard storage saves up to 365 days of continuous video<sup>1</sup>

#### 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 per head
- Scale to thousands of cameras per location
- No added equipment needed to support additional cameras

#### No hidden costs

- Hardware includes an industry-leading 10-year warranty
- Automatic firmware updates keep systems secure
- New features and enhancements are added at no additional costs

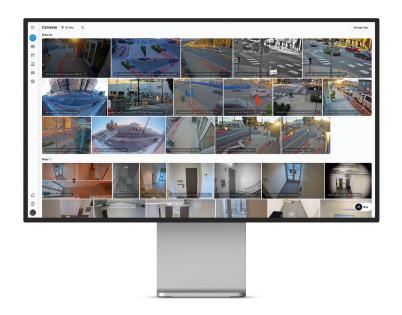


<sup>1.</sup> All our cameras record in "adaptive quality," capturing both standard and high quality streams. Standard quality (SQ) video is stored up to the amount of retention specified by the customer. The amount of high quality video stored on the camera will depend on the amount of motion detected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



#### Verkada Command overview

# All-in-one Cloud-based Management Software for Verkada Security Cameras



Command, Verkada's cloud-based management software, is designed to deliver simple access and management for all cameras and users across all sites from virtually anywhere in the world. From Command, users can set up new cameras, create sites, manage settings, access live and archived footage, manage users and access the advanced features powered by Verkada's edge-based analytics.

#### Manage from anywhere

- Remotely access footage and manage sites from any browser or device
- Native apps for iOS, Android and Verkada's VX52 Viewing Station
- Receive alerts for offline cameras, tampering and motion detection

#### Effortlessly archive and share

- Command licenses include unlimited cloud archiving and 30-days of cloud backup
- Easily export any footage in a shareable MP4 format
- Share Live Links and floorplans with first responders

#### Scale with simplicity

- Add more devices and sites without complicating the user experience
- Leverage granular roles and permissions to manage users at scale
- Bring cameras online without 3rd party plugins, thick clients or downloads

#### Stay secure from the ground up

- Stay secure with data encrypted in transit (AES 128) and at rest (AES 256)
- Access cameras securely without port-forwarding, VPNs, or complicated configurations
- Receive automatic firmware updates to stay a step ahead of emerging threats

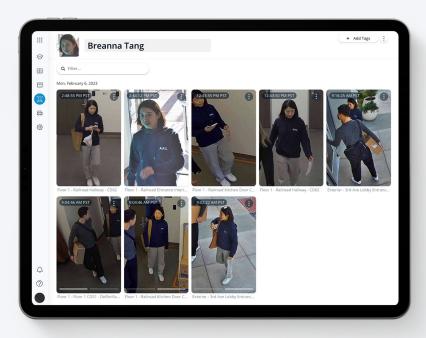
#### Quickly detect and respond to threats

- Stay informed with customizable, intelligent alerts
- Speed up investigations with intelligent people and face detection
- Search and filter to find vehicles of interest and detected license plates



### Verkada's People Analytics

# Simplify and Speed Up Investigations With Intelligent People and Face Detection



Available for all Verkada camera models, People Analytics combines intelligent edge-based video processing with computer vision in the cloud to give users high-quality images of all individuals identified in the scene. Using People Analytics, customers can filter people by various attributes and expedite investigations.

# 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 history**

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

#### **Occupancy Trends**

- Estimate how many people cross a customizable digital line on a video feed
- Monitor usage of a space to optimize business operations

#### **Attribute filters**

 Filter based on a range of attributes, including clothing color, gender appearance and facial matches

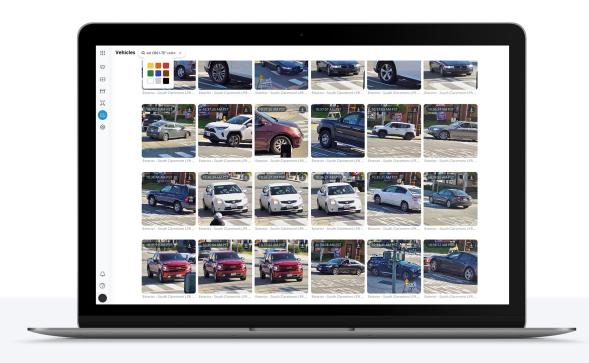
#### Person of Interest notifications

- Set up proactive SMS/email notifications for alerting when a matching face is detected by a camera
- Create a Person of Interest by using an uploaded image or an existing face from your organization



### Verkada's Vehicle Analytics

# Quickly Search and Filter To Find Vehicles of Interest



Vehicle Analytics is a powerful edge-based feature that gives users high-quality images of all vehicles identified in a scene. With Verkada's centralized management platform, customers can filter vehicles by date, time, color and body type.

# Find and Filter Vehicles With Ease

#### Vehicle history

- Browse through high-resolution snapshots of vehicles detected in frame
- Save snapshots or easily access associated full-res video

#### Investigate anywhere

• Vehicle Analytics is available from any compatible device and can be accessed from virtually anywhere in the world

#### **Attribute filters**

• Filter based on a range of attributes, including vehicle color and body type

#### Cross-camera search

- Easily find similar vehicles of interest across all cameras deployed across all sites
- Create and export playback of multiple angles of a vehicle to quickly provide evidence

#### **License Plate Recognition (LPR)**

- Leverage a dual-camera system to provide LPR coverage, monitor a live LPR feed and search by plate number
- Receive License Plate of Interest alerts via SMS or email with an image or link to review the associated footage



#### Multisensor camera

# **Tech Specs**



#### CH52-E

#### Camera features

Image Sensor	4 x 1 / 2.8" Progressive CMOS	Shutter Speed	1 / 5 sec. to 1 / 32,000 sec.
Sensor Resolution <sup>1</sup>	4 x 5MP (2688 x 1944)	Day/Night	IR-cut filter for day and night function
Lens Type	Varifocal; motorized zoom	IR Cut Filter	Yes
Focal Length	3.7-7.7mm	IR Range	30m / 98ft; non-adjustable
Aperture	F1.9 - F2.9	Minimum Illumination	0.009 lux @ F1.9 (color) 0 lux with IR Illuminators on
Iris	N/A	Onboard Storage	Capacity: From 1TB to 8TB Card: MicroSD, SDXC
Field of View (after LDC²)	Horizontal: 37°–89° (35°-82°) Vertical: 29°–65° (26°–60°) Diagonal: 46°–99° (43°-92°)	СРИ	4 x Ambarella CV25S88
Sensor Movement	Tilt: +0°-105° for each lens from horizon Pan: +/- 90° for each lens Rotation: +/- 90° for each lens		

# Standard video settings

Compression	H.264	Historical Video Settings	Adaptive quality <sup>1</sup>
Frame Rate <sup>3</sup>	24fps / sensor	WDR Technology	120dB dynamic range, true WDR, dual exposure
Video Streaming Settings (Per Head)	High quality (HQ) - 1,500 Kbps Standard quality (SQ) - 300 Kbps		

# Standard audio settings

Audio	Not supported

### Power and network

Power Input <sup>4</sup>	with IR: IEEE 802.3bt Type 3 PoE++ Without IR: IEEE 802.3at Type 2 PoE+ Extended temperature range: IEEE 802.3bt Type 3 PoE++		RJ-45 cable connector for network/PoE connection; 10/100 Mbps
Power Consumption <sup>4</sup>	With IR: 42.5 - 57V, 0.65-0.49A, 27.69W Without IR: 42.5 - 57V, 0.46-0.34A, 19.54W Extended temperature range: 42.5 - 57V, 0.91 - 0.68A, 38.68W	RTSP	RTSP 1.0 RFC 2326 Max concurrent streams: 8 (2 per camera head) Audio support: No

<sup>1.</sup> 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://www.verkada.com/blog/recording-in-adaptive-quality/

 $<sup>2.</sup> Lens \, Distortion \, Correction \, (LDC) \, crops \, the \, sensor \, field \, of \, view \, to \, deliver \, a \, rectified, \, undistorted \, output \, image.$ 

<sup>3.</sup> Frame rate can be adjusted by Support.

 $<sup>4.</sup> Extended temperature range includes operating temperatures below - 8.5 ^{\circ}\text{C} / 16.7 ^{\circ}\text{F} \text{ and assumes IR will be enabled.}$ 



# Multisensor camera

# Tech Specs



#### CH52-E

### General

Operating Temperature	-40°C to 50°C / -40°F to 122°F	LED Indicator	System power and status indicator
Humidity	0 to 90%	Warranty	10 Years
Certifications	FCC, ICES-003, UL/IEC 62368-1, CE, RCM, UKCA, VCCI, NDAA, BIS, IK10 impact rating, IP66 weather rating	Included Accessories	IR cover, mounting template, 3 mounting screws, 3 wall anchors, 2 desiccants, T10 security screwdriver, offset wrench

### Mechanical

Weight	Camera: 2,900g / 102.3oz Mount plate: 536g / 18.9oz	Body	Aluminum, plastic dome trim
Dimensions	Ø: 275mm / 10.82in, H: 118mm / 4.65in with mount plate Ø: 267mm / 10.51in, H: 114mm / 4.49in without mount plate		

# **Dimensions**

275mm / 10.82in





# Software capabilities

Alerts <sup>5</sup>	Camera status, motion detection, people detection, vehicle detection, Person of Interest detection, crowd detection	Streaming and Storage⁵	Cloud backup, configurable retention days, selectable storage location, low bandwidth mode, timelapse, RTSP
People Analytics <sup>5</sup>	People search, attribute search, face search, Occupancy Trends	Sharing and Privacy⁵	Live Link, privacy regions, audit log
Vehicle Analytics <sup>5</sup>	Vehicle search, attribute search		

# Coverage examples

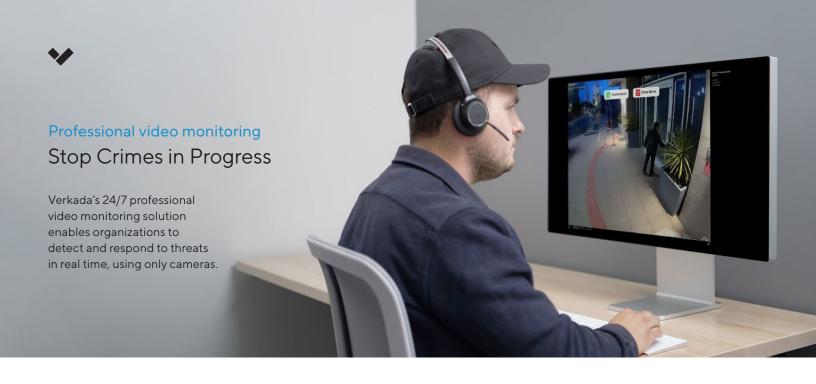


270°





328°



### Meet your virtual guard

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 on site 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 relevant video footage to determine if there is a threat to people or property.
- Video-verification helps to ensure priority police response and screens out false alarms.

#### Take action

- If there is a legitimate threat, the monitoring agent will immediately notify your designated call list.
- Agents can also request emergency dispatch or talk down to intruders through an on-site speaker. Automated responses can include locking doors or turning on sirens.
- If there is no visible threat, the agent will dismiss the incident.

#### Key benefits



Leverage cameras as intrusion sensors



Deter intruders with remote talk down



Emergency services dispatch



More complete coverage than in person guard



No third-party



Remote visibility and control

Professional monitoring of Verkada cameras is included in the LIC-BA Alarms License. One Alarms License is required for each unique site address, with no limit on monitored cameras. Professional monitoring is provided by fully redundant, US-based, UL-listed central monitoring stations with Five Diamond Certification from The Monitoring Association. Additional licensed monitoring centers available in Canada, the UK and Australia.



# Ordering Information

# Multisensor pricing

Model Number	MP¹	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention <sup>1</sup>	People/ Vehicle Analytics	Cost (MSRP) <sup>USD</sup>
CH52-1TBE-HW	20MP	<b>~</b>	Zoom	30m / 98ft	1TB	30 Days	<b>~</b>	\$3,599
CH52-2TBE-HW	20MP	~	Zoom	30m / 98ft	2TB	60 Days	<b>~</b>	\$4,899
CH52-4TBE-HW	20MP	<b>~</b>	Zoom	30m / 98ft	4TB	120 Days	~	\$7,499
CH52-8TBE-HW	20MP	~	Zoom	30m / 98ft	8TB	365 Days	~	\$12,699

# Video Security Cloud License pricing<sup>2</sup>

Model Number	Description	Cost (MSRP) USD
LIC-CH52-1Y	1-Year CH52-E Multisensor Camera License	\$599
LIC-CH52-3Y	3-Year CH52-E Multisensor Camera License	\$1,649
LIC-CH52-5Y	5-Year CH52-E Multisensor Camera License	\$2,699
LIC-CH52-10Y	10-Year CH52-E Multisensor Camera License	\$5,399
	IU-Year CH52-E Multisensor Camera License	+=/=

# Accessories pricing

ACC-MNT-2	Mounting Arm Kit for Pendant Cap (ACC-MNT-8)	\$89
ACC-MNT-8	Pendant Cap Mount Kit	\$69
ACC-MNT-9	Pole Mount, 2nd Generation	\$209
ACC-MNT-10	Corner Mount Kit	\$199
ACC-POE-60W	PoE++ (802.3bt) Injector, GigE	\$149

<sup>1.</sup> 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://www.verkada.com/blog/recording-in-adaptive-quality/

<sup>2.</sup> The CH52-E requires a separate license from other Verkada Cameras.



# Ordering Information

# Viewing Station pricing

Model Number	Description	Cost (MSRP) USD
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