Manuals+ — User Manuals Simplified.

Verkada CH52-E Multisensor Camera User Manual

Contents

Verkada CH52-E Multisensor Camera

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 sensors
- **Storage & 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 sensor)
  - Edge processing for motion, people and vehicle analytics
- **Environmental ratings**
  - Vandal proof IK10 rating
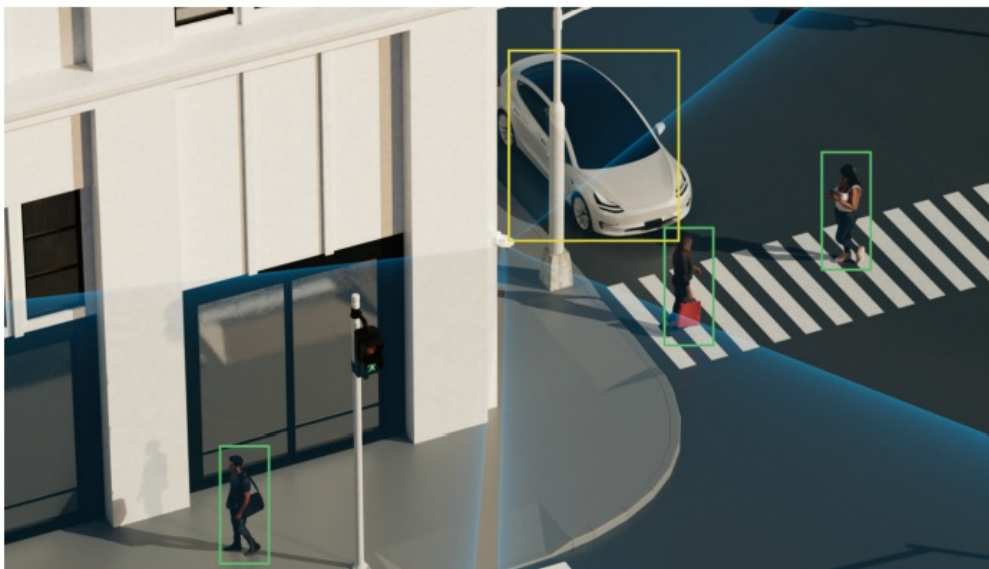 - Weather proof IP66 rating

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
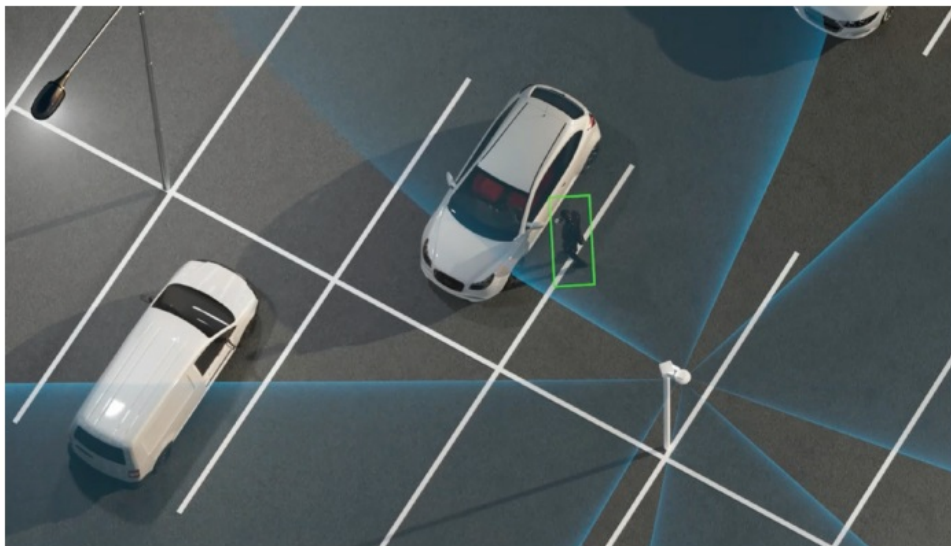
Verkada's Hybrid Cloud Architecture

- **No NVR or DVRs**

  Industrial–grade solid state storage saves up to 365 days of continuous video*

- **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

No NVR or DVRs　　　　**Easy to Scale**　　　　**Centralized Management**

The reliability of on–camera solid–state 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 sensor
  - 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

Command Platform Overview

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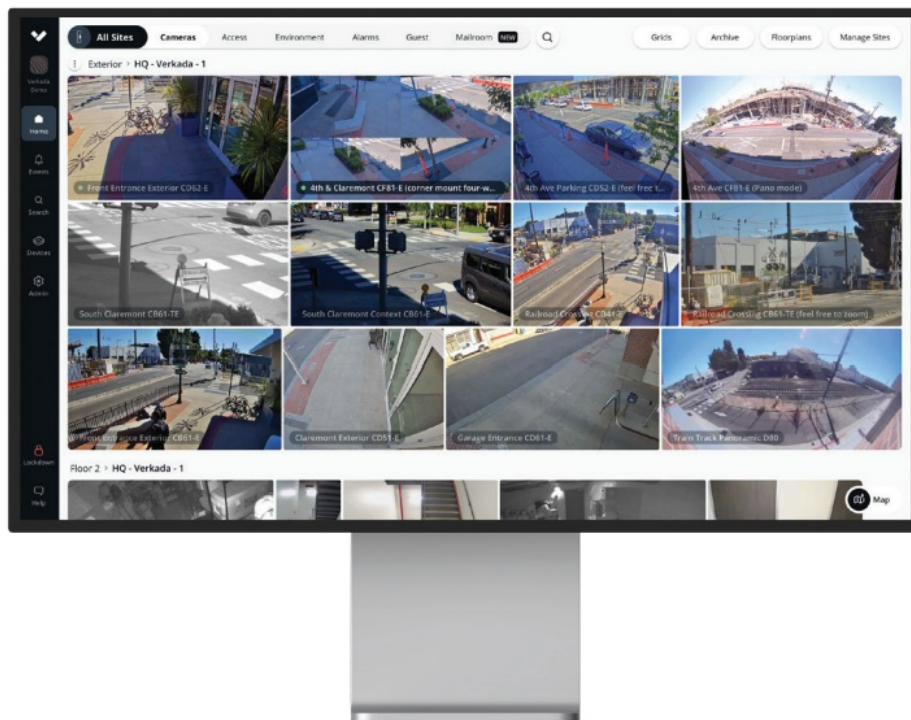
Command, Verkada's cloud−based management software, is designed to deliver simple access and management for all cameras and users across all sites from virtually anywhere in the world. From Command, users can set up new cameras, create sites, manage settings, access live and archived footage, manage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

- **User Permissions & Account Security**
  - SAML/OAuth support for single sign−on
  - 2−factor authentication options
  - User permissions can be controlled at camera, site and organization levels
- **Remote Access**
  - Access from nearly any device (desktops, smartphones, tablets)
  - Native apps for iOS, Android and Verkada's VX52 Viewing Station
- **Archiving and Sharing**
  - Command licenses include unlimited cloud archiving
  - Easily export any footage in a shareable MP4 format
  - Create and share Live Links with first responders
- **Powerful Edge−Based Analytics**
  - Search footage by date, time and motion
  - Access people and vehicle analytics to simplify investigations

Key Features

- View and manage video from any device (desktop, smartphone, tablet)
- No 3rd party plugins, thick clients, or downloads required
- Encryption in transit (AES 128) and at rest (AES 256)
- No port−forwarding or VPNs
- Detailed user access and audit logs
- Live Link sharing

- Unlimited cloud archiving with footage exports in MP4 format
- Alerts for offline cameras, tampering, and motion detection
- 30–days of cloud backup included

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 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 Tracking**

- 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

Sensor Resolution*	4 x 5MP (2688 x 1944)	**Power Input**	IEEE 802.3bt PoE++, 10/100Mbps
Lens Type	Power Zoom	**Power Consumption**	42.5 - 57V, 0.91 - 0.68A, 38.8W
Image Sensor	4 x 1 / 2.8" Progressive CMOS	**Connectivity**	RJ-45 cable connector for Network/PoE connection
Focal Length	3.7-7.7mm	**LED Indicator**	System power and status indicator
Iris	P-Iris	**Weight**	Camera: 2.9kg / 102.3oz Mount Plate: 0.5kg / 18.9oz
Focus	Autofocus	**Dimensions**	Ø: 275mm / 10.82in, H:118 mm / 4.65in with mount plate Ø: 267mm / 10.51in, H:114 mm / 4.49in without mount plate
Aperture	F1.9 - F2.9	**Operating Temperature**	-40°C - 50°C (-40°F - 122°F)
Day/Night	IR-cut filter for day & night function	**Humidity**	90%
Field of View (after LDC)**	Horizontal: 37°-89° (35°-82°) Vertical: 29°-65° (26°-60°) Diagonal: 46°-99° (43°-92°)	**Certifications**	FCC, CE, RCM, UKCA, ICES (CANADA), VCCI, IP66, IK10 vandal resistance
IR Range	30m / 98ft	**Audio**	No
Onboard Storage	From 1TB to 8TB	**Included Accessories**	IR cover, mounting template, 3 mounting screws, 3 wall anchors, 2 desiccants, T10 security screwdriver, offset wrench
		RTSP	RTSP 1.0 RFC 2326 Max Concurrent Streams: 8 (2 per sensor) Audio Support: No

- 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/**
- Lens Distortion Correction (LDC) crops the sensor field of view to deliver a rectified, undistorted output image.

Professional Video Monitoring for Verkada Cameras

Meet Your Virtual Guard

- Verkada offers a 24/7 professional monitoring service to review and respond to events from your Verkada

cameras.

- Monitoring is provided by three fully redundant, U.S.–based, UL listed central stations with Five Diamond Certification from The Monitoring Association
- **Assess the Situation**
  - While your site is armed, our agents will review video in real time when any camera detects a person.
  - If the person is deemed a threat to people or property, an alarm will be raised.
- **Make Contact**
  - When an alarm is raised, agents will call and send SMS messages to the predetermined contact list.
  - If there's a visible emergency in progress, agents will contact local emergency services immediately.
- **Take Action**
  - If a threat is confirmed by someone on the contact list, or if no one can be reached, agents will dispatch local first responders to the site address.
  - All events can be reviewed, archived and accessed from Command for incident investigation.
- **Alarm License Pricing**

  Professional monitoring of Verkada cameras is included in the Alarm License. The Alarm License includes access to the cloud–managed Verkada Alarms platform and unlimited video review of person detection events. One Alarm License is required for each unique site address, with no limit on monitored cameras.

Alarm License Pricing

Model Number	Description	Cost (MSRP) USD
LIC–BA–1Y	1–Year Alarm License	$1,499
LIC–BA–3Y	3–Year Alarm License	$3,999
LIC–BA–5Y	5–Year Alarm License	$5,999
LIC–BA–10Y	10–Year Alarm License	$11,999

Ordering Information

Multisensor Pricing

Model Number	MP*	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention*	People/ Vehicle Analytics	Cost (MSRP) USD
CH52-1TBE-HW	20MP	✓	Zoom	30m / 98ft	1TB	30 Days	✓	$3,599
CH52-2TBE-HW	20MP	✓	Zoom	30m / 98ft	2TB	60 Days	✓	$4,899
CH52-4TBE-HW	20MP	✓	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**

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

'*The CH52-E requires a separate license from other Verkada Cameras.

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	Verkada Pole Mount, 2nd Generation	$209
ACC-MNT-10	Corner mount kit	$199
ACC-POE-60W	Verkada PoE++ (802.3bt) injector, GigE	$149

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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

WEB: sales@verkada.com

Documents / Resources

Verkada CH52-E Multisensor Camera [pdf] User Manual
CH52-E, Multisensor Camera, CH52-E Multisensor Camera, Camera, 4 Independent cameras from a single install point

References

- ❖ [Recording in Adaptive Quality](#)