FIPS-Validated Cameras

Overview

Verkada's FIPS-validated cameras have durable, vandal-resistant designs, advanced computer vision features, and encryption that meets the FIPS 140-2 and FedRAMP Moderate Ready standards that help provide robust, government-grade coverage. These cameras will run FIPS encryption in transit and at rest by default, with no additional settings or configuration required. The FIPS series cameras are also TAA and FY2019 NDAA compliant.

These hybrid cloud cameras are easy to install and require no additional setup, downloads, or configuration. They have standard features like onboard storage and advanced motion-based insights, allowing organizations to quickly scale their security coverage and increase situational awareness across multiple locations. These cameras also have powerful edge processing capabilities that deliver advanced computer vision features, including Verkada's People and Vehicle Analytics, and License Plate Recognition for FIPS-validated bullet models.

FIPS-validated cameras are compatible with the standard Verkada Command platform, as well as Command hosted in AWS GovCloud (exclusively available to US government organizations[1]). With Verkada's FIPS-validated domes, bullets, fisheye, multisensor, and PTZs, organizations can benefit from a wide breadth of camera models and features that include additional layers of government-grade data protection.

Key features

Government-grade security

- Meets the FIPS 140-2 standard, as validated by NIST
- Designated FedRAMP Moderate Ready by the Federal Risk and Authorization Management Program (FedRAMP®)
- TAA and FY2019 NDAA compliant

Enterprise-grade performance

- High-resolution image sensors
- Dedicated system-on-a-chip for an enhanced streaming experience
- Advanced edge processing for motion detection, People and Vehicle Analytics and Bullet-specific License Plate Recognition

Storage and processing

- Models range from 30 - 365 days (256GB - 3TB) of onboard storage
- Low–bandwidth impact, only using 20–50 kbps per camera when motion is not detected

1. Federal, state, local, or tribal organizations, research institutions, federal contractors, and government contractors.

Verkada Hybrid Cloud Benefits Overview

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

Easy to scale
Bandwidth friendly and supports thousands of globally-distributed sites

Centralized management
Modern platform enables secure remote access on any supported browser or device

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

Lightweight, hassle-free installation

- No NVRs, DVRs, or servers—just a PoE connection
- Cameras come online and configure in minutes without 3rd party plugins, thick clients, or downloads
- No additional software or complexities like port forwarding

Easy to use

- Intuitive UI for streamlined investigations and quick incident resolution
- Provision user accounts to access footage and features without additional training
- Find, download, and share footage from any supported browser or device

Predictable total cost of ownership

- Hardware includes a 10-year warranty[2]
- New software features are pushed over-the-air, without any additional cost

Scalable across sites

- Onboard storage and processing for reduced bandwidth consumption
- Cloud-based management platform centralizes globally-distributed devices
- Automatic firmware updates keep systems secure, eliminating the need for ongoing maintenance

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
2. The CD22, CD22-E, and all PTZ cameras come with a 5-year warranty.

Verkada Command: Centralized, Cloud-Based Management for Distributed Deployments
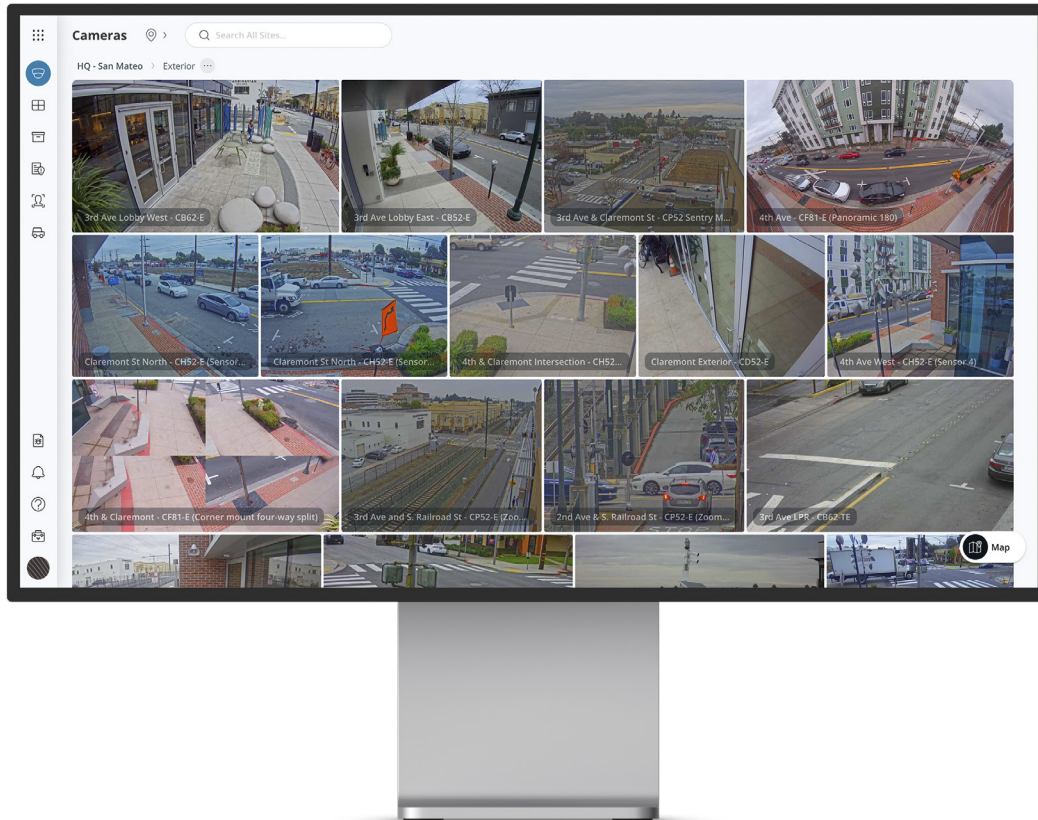
Command, Verkada's cloud-based management software, centralizes management of Verkada devices across globally-distributed sites. Within Command, users can provision new cameras, create and organize sites, manage device settings, access live and historical footage, manage users, and leverage advanced analytics.

Manage from anywhere

- Remotely access footage and manage devices from any supported browser or device
- Leverage the Command Mobile app for visibility on the go

Scale with simplicity

- Add more devices and sites without complicating the user experience
- Leverage granular roles and permissions to manage users at scale
- SAML-based integration with single sign-on (SSO) solutions

Keep data secure

- Enterprise Controlled Encryption provides robust data protection, security, and control
- Stay secure with data encrypted in transit (AES 128) and at rest (AES 256)
- Receive automatic firmware updates to stay a step ahead of emerging threats

Quickly detect and respond to threats

- Stay informed with customizable, intelligent alerts
- Filter people using attribute search and create Person of Interest (POI) profiles for specific subjects
- Search and filter to find vehicles and license plates of interest

Streamline incident management

- Accelerate investigations with intelligent people, face, and vehicle detection
- Consolidate relevant footage to easily review and share with internal and external stakeholders

Archive and share over the cloud

- Command licenses include unlimited cloud archiving and 30-days of cloud backup
- Easily export any footage in MP4 format and allow recipients to verify its authenticity
- Share live links and historical footage with first responders

Verkada's People and Vehicle Analytics

Simplify Investigations with Intelligent People, Face, and Vehicle Detection
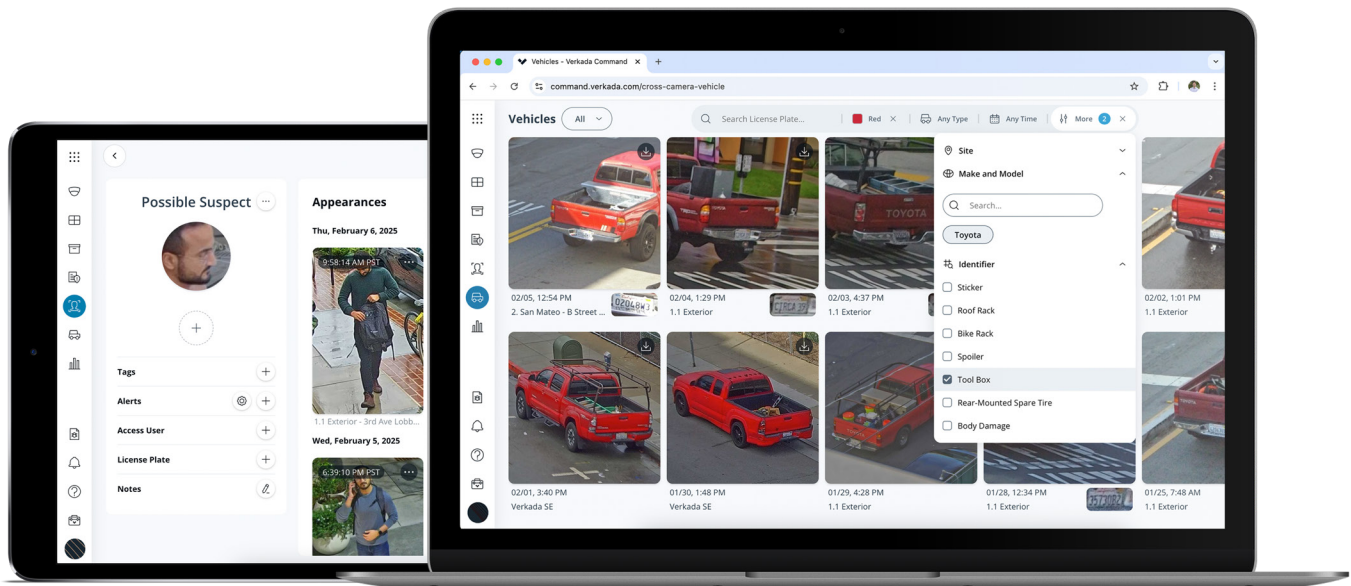
People and Vehicle Analytics combine intelligent edge-based video processing with computer vision to give users high-quality, cloud-based images of all individuals and vehicles identified across one's fleet. Using these analytics, security teams can filter for highly-detailed and specific attributes of people or vehicles.

Bring Intelligence to Investigations

Face search

- Quickly surface all appearances of a possible suspect by searching across all cameras for facial matches in a privacy-sensitive way[1]

Person and vehicle history

- Browse through high-resolution snapshots of people and vehicles detected
- Click into a snapshot of a suspect and use history player search to find all other instances of the individual in question throughout one's fleet

Person and License Plate of Interest notifications

- Create a Person of Interest using an uploaded photo or existing face in Command
- Set up proactive SMS, email, or mobile app notifications for when a matching Person of Interest is detected across one's cameras
- Use a freeform search bar to find matching license plates of interest. Further filter for potential license plate matches by U.S. state[2]
- Link License Plates of Interest to a Person of to create a comprehensive profile of suspects in question

Attribute filters

- Search for people and vehicles using a detailed list of prescribed attribute filters
- Use the vehicle search page to filter footage by vehicle color, type, virtually any make and model, and unique identifiers like noticeable body damage
- Use the people search page to filter footage by clothing color, gender appearance, and the presence of hard hats, safety vests, and other PPE – ideal for ensuring workplace safety

1. At Verkada, we intentionally do not train our People Analytics models to identify sensitive characteristics such as race, ethnicity, age, or other demographic information. We also set administrative guardrails around the use of People Analytics: it is disabled by default and after opting in, only users authorized by an Organization's admin may enable or view analytics on a given device.
2. License plate recognition is only supported on Verkada's bullet cameras.

License Plate Recognition

Enhanced Vehicle Insights with Verkada's Powerful LPR Camera Solution
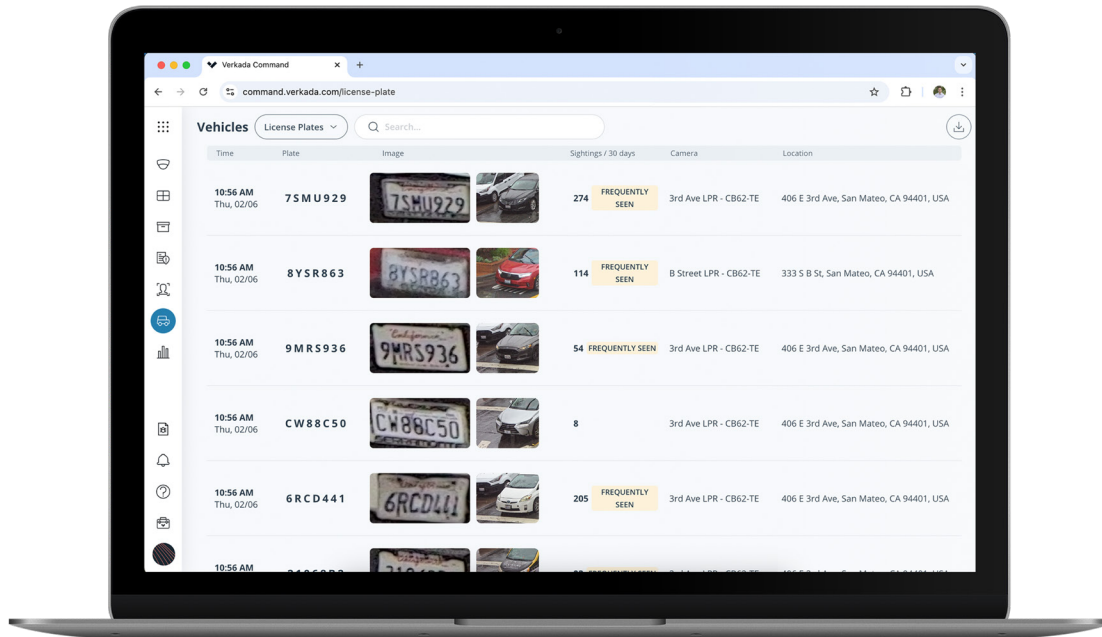
Verkada's License Plate Recognition (LPR) solution allows organizations to monitor license plates in real-time and streamline vehicle investigations. The solution uses Verkada's edge-based processing and computer vision technology to capture license plate images and provide users with a readable and searchable list of license plate numbers. These captures are connected to live or recorded video for added context.

Automatic License Plate Detection

Track fast-moving vehicles and broaden coverage

Capture license plate characters at speeds of up to 80 mph / 128 kph, cover up to three lanes of traffic and identify international or U.S. state-specific license plates – all with high precision and low latency[1]

Conduct exhaustive vehicle investigations

Use LPR to reconstruct a map of a vehicles' whereabouts and help security teams pinpoint vehicles of interest across expansive areas, like multiple city blocks

Find license plates even with limited information

Verkada's LPR provides approximate license plate matches even if the inputted characters are incorrect or if the system is unable to detect all characters

Receive custom License Plate of Interest Alerts

Send alerts via SMS, email, or mobile app to specific individuals or entire teams when designated license plates are detected across LPR-enabled cameras

1. For best results, install cameras as outlined in the User Guide for License Plate Recognition.

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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 256GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 97° (78°) Vertical: 71° (63°) Diagonal: 128° (91°)	**CPU**	Ambarella CV25S88
Sensor Movement	Tilt: 60° Pan: 355° 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

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 Mbps
Power Consumption[4]	With IR: 37-57V, 0.23-0.15A, 8.6W Without IR: 37-57V, 0.11-0.07A, 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. 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.
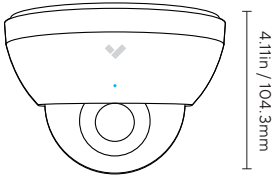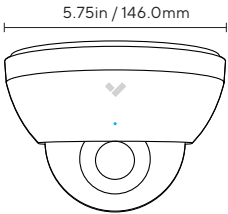
CD42-F
Tech Specs

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	UL, FCC, CB, CE, BIS, NOM, KCC, IK08 impact rating, FIPS 140-2, TAA compliant	**Included Accessories**	Setup guide, T10 security torx screwdriver, screw pack, mounting template

Mechanical

Weight	Camera: 608g / 21.45oz Mount plate: 140g / 4.94oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 146.0mm / 5.75in, H: 104.3mm / 4.11in with mount plate Ø: 146.0mm / 5.75in, H: 99.8mm / 3.93in without mount plate		

Dimensions

5.75in / 146.0mm

4.11in / 104.3mm

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	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends		

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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	Varifocal; motorized zoom	**IR Cut Filter**	Yes
Focal Length	2.8-8mm	**IR Range**	30m / 98ft
Aperture	F1.3 - F2.4	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	P-Iris	**Onboard Storage**	Capacity: From 256GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 105° - 38° (84° - 37°) Vertical: 77° - 29° (68° - 28°) Diagonal: 126° - 48° (97° - 45°)	**CPU**	Ambarella CV25S88
Sensor Movement	Tilt: 60° Pan: 355° Rotation: 350°		

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	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 Mbps
Power Consumption[4]	With IR: 37-57V. 0.30-0.20A, 11.0W Without IR: 37-57V, 0.13-0.08A, 4.7W Extended temperature range: N/A	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: Yes

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3. Frame rate can be adjusted by support.
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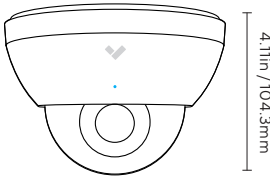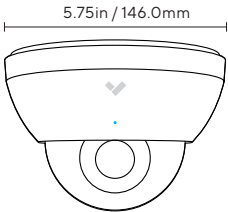
CD52-F
Tech Specs

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, KCC, IK08 impact rating, FIPS 140-2, TAA compliant	**Included Accessories**	Setup guide, T10 security torx screwdriver, screw pack, mounting template

Mechanical

Weight	Camera: 776g / 29.88oz Mount plate: 140g / 4.94oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 146.0mm / 5.75in, H: 104.3mm / 4.11in with mount plate Ø: 146.0mm / 5.75in, H: 99.8mm / 3.93in without mount plate		

Dimensions

5.75in / 146.0mm

4.11in / 104.3mm

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	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends		

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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 256GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 97° (78°) Vertical: 71° (63°) Diagonal: 128° (91°)	**CPU**	Ambarella CV25S88
Sensor Movement	Tilt: 60° Pan: 355° 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

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 802.3at Type 2 PoE+	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
Power Consumption[4]	With IR: 37-57V, 0.23-0.15A, 8.6W Without IR: 37-57V, 0.11-0.07A, 4.3W Extended temperature range: 37-57V, 0.46-0.30A, 16.9W	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: Yes

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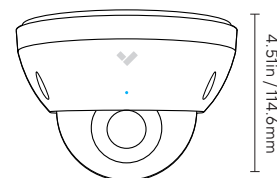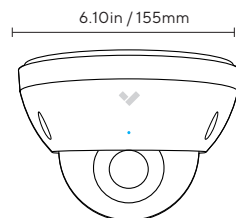
CD42-E-F
Tech Specs

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, CE, UL, CB, NOM, IP67 weather rating, IK10 impact rating, KCC, FIPS 140-2, TAA compliant	**Included Accessories**	Setup guide, wall mount screws and anchors (4x), T10 security torx screwdriver, mounting template, cable gland wrench, desiccant pack, conduit adapter

Mechanical

Weight	Camera: 847g / 29.88oz Mount plate: 174g / 6.14oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 155.0mm / 6.10in, H: 114.6mm / 4.51in with mount plate Ø: 155.0mm / 6.10in, H: 107.6mm / 4.24in without mount plate		

Dimensions

6.10in / 155mm

4.51in / 114.6mm

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	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends		

CD52–E-F
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	Varifocal; motorized zoom	**IR Cut Filter**	Yes
Focal Length	2.8-8mm	**IR Range**	30m / 98ft
Aperture	F1.3 - F2.4	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	P-Iris	**Onboard Storage**	Capacity: From 256GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 105° - 38° (84° - 37°) Vertical: 77° - 29° (68° - 28°) Diagonal: 126° - 48° (97° - 45°)	**CPU**	Ambarella CV25S88
Sensor Movement	Tilt: 60° Pan: 355° Rotation: 350°		

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	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 802.3at Type 2 PoE+	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
Power Consumption[4]	With IR: 37-57V, 0.30-0.20A, 11.0W Without IR: 37-57V, 0.13-0.08A, 4.7W Extended temperature range: 37-57V, 0.43-0.28A, 16.0W	**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.

CD52–E-F
Tech Specs

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, CE, UL, CB, NOM, KCC, IP67 weather rating, IK10 impact rating, FIPS 140-2, TAA compliant	**Included Accessories**	Setup guide, wall mount screws and anchors (4x), T10 security torx screwdriver, mounting template, cable gland wrench, desiccant pack, conduit adapter

Mechanical

Weight	Camera: 1070g / 37.74oz Mount plate: 174g / 6.14oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 155.0mm / 6.10in, H: 114.6mm / 4.51in with mount plate Ø: 155.0mm / 6.10in, H: 107.6mm / 4.24in without mount plate		

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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
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CB52-E-F
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	Varifocal; motorized zoom	**IR Cut Filter**	Yes
Focal Length	2.8mm–8mm	**IR Range**	30m / 98ft
Aperture	F1.3–F2.4	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	P–Iris	**Onboard Storage**	Capacity: From 256GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 99° - 41° (95° - 39°) Vertical: 74° - 30° (74° - 30°) Diagonal: 125° - 50° (110° - 48°)	**CPU**	Ambarella CV25S88
Camera Movement	Tilt: 0° to 90° Pan: 360° Rotation: 360°		

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: IEEE 802.3at Type 2 PoE+ Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: IEEE 802.3at Type 2 PoE+	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
Power Consumption[4]	With IR: 37-57V, 0.38-0.25A, 14.0W Without IR: 37-57V, 0.09-0.06A, 3.5W Extended temperature range: 37-57V, 0.61-0.37A, 22.6W	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: No

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4. Extended temperature range includes operating temperatures below -8.5°C / 16.7°F and assumes IR will be enabled.
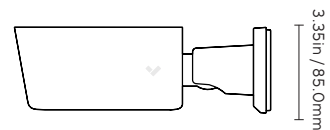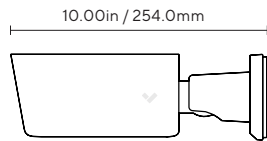
CB52-E-F
Tech Specs

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, CE, UKCA, RCM, VCCI, BIS, UL/IEC62368-1, IP67 weather rating, IK10 impact rating	**Included Accessories**	4x M4x8 screws, 4x TP4x30 mount screws, mount plate, junction box adapter, junction box cover, T25 hand tool

Mechanical

Weight	Camera: 1464g / 51.6oz Mount plate: 33g / 1.16oz	**Body**	Aluminum
Dimensions	Ø: 85.0mm / 3.35in L: 254.0mm / 10.00in		

Dimensions

10.00in / 254.0mm

3.35in / 85.0mm

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	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends	**License Plate Recognition**	License Plate of Interest alerts, license plate indexing

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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	Varifocal; motorized zoom	**IR Cut Filter**	Yes
Focal Length	8mm–20mm	**IR Range**	50m / 164ft
Aperture	F1.5–F2.8	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	P–Iris	**Onboard Storage**	Capacity: From 256GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 38° - 16° (37° - 16°) Vertical: 28° - 12° (27° - 12°) Diagonal: 48°- 19° (44° - 19°)	**CPU**	Ambarella CV25S88
Camera Movement	Tilt: 0° to 90° Pan: 360° Rotation: 360°		

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: IEEE 802.3at Type 2 PoE+ Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: IEEE 802.3at Type 2 PoE+	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
Power Consumption[4]	With IR: 37-57V, 0.38-0.25A, 14.0W Without IR: 37-57V, 0.09-0.06A, 3.5W Extended temperature range: 37-57V, 0.61-0.37A, 22.6W	**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.
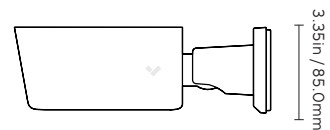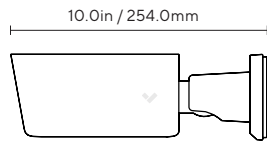
CB52-TE-F
Tech Specs

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, CE, UKCA, RCM, VCCI, BIS, UL/IEC62368-1, IP67 weather rating, IK10 impact rating	**Included Accessories**	4x M4x8 screws, 4x TP4x30 mount screws, mount plate, junction box adapter, junction box cover, T25 hand tool

Mechanical

Weight	Camera: 1478g / 52.1oz Mount plate: 33g / 1.16oz	**Body**	Aluminum
Dimensions	Ø: 85.0mm / 3.35in L: 254.0mm / 10.00in		

Dimensions

10.0in / 254.0mm

3.35in / 85.0mm

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	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends	**License Plate Recognition**	License Plate of Interest alerts, license plate indexing

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Camera features

Image Sensor	1 / 2.8" Progressive CMOS	**Shutter Speed**	1 / 30 sec. to 1 / 10,000 sec.
Sensor Resolution[1]	4K (3840 x 2160)	**Day/Night**	IR-cut filter for day and night function
Lens Type	Varifocal; motorized zoom	**IR Cut Filter**	Yes
Focal Length	2.8mm–8mm	**IR Range**	30m / 98ft
Aperture	F1.3–F2.4	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	P–Iris	**Onboard Storage**	Capacity: From 512GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 107° - 43° (106° - 41°) Vertical: 62° - 24° (62° - 24°) Diagonal: 126° - 49° (119° - 48°)	**CPU**	Ambarella CV22S66
Camera Movement	Tilt: 0° to 90° Pan: 360° Rotation: 360°		

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 4,500 Kbps (default) Standard quality (SQ): Up to 600 Kbps

Standard audio settings

Audio	Not supported

Power and network

Power Input[4]	With IR: IEEE 802.3at Type 2 PoE+ Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: IEEE 802.3at Type 2 PoE+	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
Power Consumption[4]	With IR: 37-57V, 0.40-0.26A, 14.9W Without IR: 37-57V, 0.11-0.08A, 4.3W Extended temperature range: 37-57V, 0.64-0.39A, 23.7W	**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.
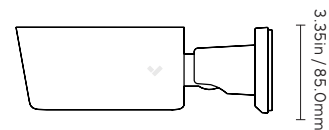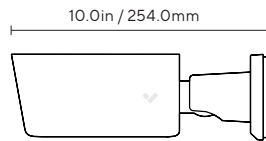
CB62-E-F
Tech Specs

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, CE, UKCA, RCM, VCCI, BIS, UL/IEC62368-1, IP67 weather rating, IK10 impact rating	**Included Accessories**	4x M4x8 screws, 4x TP4x30 mount screws, mount plate, junction box adapter, junction box cover, T25 hand tool

Mechanical

Weight	Camera: 1464g / 51.6oz Mount plate: 33g / 1.16oz	**Body**	Aluminum
Dimensions	Ø: 85.0mm / 3.35in L: 254.0mm / 10.00in		

Dimensions

10.0in / 254.0mm

3.35in / 85.0mm

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	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends	**License Plate Recognition**	License Plate of Interest alerts, license plate indexing

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Camera features

Image Sensor	1 / 2.8" Progressive CMOS	**Shutter Speed**	1 / 30 sec. to 1 / 10,000 sec.
Sensor Resolution[1]	4K (3840 x 2160)	**Day/Night**	IR-cut filter for day and night function
Lens Type	Varifocal; motorized zoom	**IR Cut Filter**	Yes
Focal Length	8mm–20mm	**IR Range**	50m / 164ft
Aperture	F1.5–F2.8	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	P–Iris	**Onboard Storage**	Capacity: From 512GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 42° - 17° (41° - 17°) Vertical: 23° - 9° (23° - 9°) Diagonal: 48° - 19° (46° - 19°)	**CPU**	Ambarella CV22S66
Camera Movement	Tilt: 0° to 90° Pan: 360° Rotation: 360°		

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 4,500 Kbps (default) Standard quality (SQ): Up to 600 Kbps

Standard audio settings

Audio	Not supported

Power and network

Power Input[4]	With IR: IEEE 802.3at Type 2 PoE+ Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: IEEE 802.3at Type 2 PoE+	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
Power Consumption[4]	With IR: 37-57V, 0.40-0.26A, 14.9W Without IR: 37-57V, 0.11-0.08A, 4.3W Extended temperature range: 37-57V, 0.64-0.39A, 23.7W	**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.

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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, CE, UKCA, RCM, VCCI, BIS, UL/IEC62368-1, IP67 weather rating, IK10 impact rating	**Included Accessories**	4x M4x8 screws, 4x TP4x30 mount screws, mount plate, junction box adapter, junction box cover, T25 hand tool

Mechanical

Weight	Camera: 1478g / 52.1oz Mount plate: 33g / 1.16oz	**Body**	Aluminum
Dimensions	Ø: 85.0mm / 3.35in L: 254.0mm / 10.00in		

Dimensions

10.00in / 254.0mm

3.35in / 85.0mm

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	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends	**License Plate Recognition**	License Plate of Interest alerts, license plate indexing

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Camera features

Image Sensor	1 / 1.6" Progressive CMOS	**Shutter Speed**	1 / 120 sec. to 1 / 32000 sec.
Sensor Resolution[1]	12.5MP (3536 x 3536); resolution (3520 x 3520)	**Day/Night**	IR-cut filter for day and night function
Lens Type	Fixed	**IR Cut Filter**	Yes
Focal Length	1.7mm	**IR Range**	20m / 66ft
Aperture	F2.0	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	Fixed	**Onboard Storage**	Capacity: From 512GB to 3TB Card: MicroSD, SDXC
Field of View	Horizontal: 180° Vertical: 180° Diagonal: 180°	**CPU**	Ambarella CV72S66

Standard video settings

Compression	H.265, H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[2]	24fps	**WDR Technology**	120dB dynamic range, true WDR, dual exposure
Live Streaming Settings	High quality (HQ): Up to 4,500 Kbps (default) Standard quality (SQ): Up to 600 Kbps		

Standard audio settings

Audio	Supported	**Interface**	Built-in microphone
Audio Capacity	One-way audio	**Effective Range**	5m / 16ft

Power and network

Power Input[3]	With IR: IEEE 802.3at Type 2 PoE+ Extended temperature range: IEEE 802.3at Type 2 PoE+	**Connectivity**	RJ-45 cable connector for network/ PoE connection; 10 / 100 / 1000 Mbps
Power Consumption[3]	With IR: 43-57V, 0.46-0.34A, 19.5W Without IR: 43-57V, 0.22-0.17A, 9.5W Extended temperature range: 43-57V, 0.58-0.44A, 24.8W	**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. Frame rate can be adjusted by support.
3. Extended temperature range includes operating temperatures below -8.5°C / 16.7°F and assumes IR will be enabled.

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Tech Specs
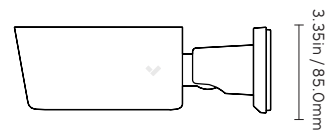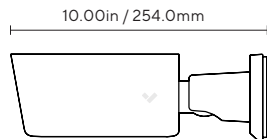
General

Operating Temperature	-40°C to 50°C / -40°F to 122°F	**LED Indicator**	System power, status indicator, and debug indicator
Humidity	0 to 90%	**Warranty**	10 Years
Certifications	FCC, ICES, IK10 impact rating, IP66/67 weather rating, FIPS 140-2 validated, TAA and FY2019 NDAA compliant	**Included Accessories**	Screw packs, mount plate with leveler, cable sealing rubber for 6.5-7.5mm, conduit adapter, T10 security driver

Mechanical

Weight	Camera: 1368g / 48.25oz Mount plate: 196g / 6.91oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 155.0mm / 6.10in, H: 76.2mm / 3.00in with mount plate Ø: 155.0mm / 6.10in, H: 69.2mm / 2.72in without mount plate		

Dimensions

6.10in / 155.0mm

3.00 in / 76.2mm

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, motion search, trajectory analysis[4], selective face blurring	**Sharing and Privacy**	Live links, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis[4]		

4. Trajectory analysis is supported in four-way split, panoramic, and ePTZ circle mode.

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Camera features

Image Sensor	4 x 1 / 2.8" Progressive CMOS	**Shutter Speed**	1 / 5 sec. to 1 / 32,000 sec.
Sensor Resolution[1]	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 LDC[2])	Horizontal: 89° - 37° (82° - 35°) Vertical: 65° - 29° (60° - 26°) Diagonal: 99° - 46° (92° - 43°)	**CPU**	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.265, H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[3]	24fps / sensor	**WDR Technology**	120dB dynamic range, true WDR, dual exposure
Live Streaming Settings (Per Head)	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: IEEE 802.3bt Type 3 PoE++ Without IR: IEEE 802.3at Type 2 PoE+ Extended temperature range: IEEE 802.3bt Type 3 PoE++	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
Power Consumption[4]	With IR: 43-57V, 0.65-0.49A, 27.7W Without IR: 43-57V, 0.46-0.34A, 19.5W Extended temperature range: 43-57V, 0.91-0.68A, 38.7W	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 8 (2 per camera head) 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.

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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, 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: 275.0mm / 10.82in, H: 118.0mm / 4.65in with mount plate Ø: 267.0mm / 10.51in, H: 114.0mm / 4.49in without mount plate		

Dimensions

275.0mm / 10.82in

118.0mm / 4.65in

Software capabilities

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

Coverage examples

270°

328°

5. All the listed features can be enabled independently for each camera head.

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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	Varifocal; motorized zoom	**IR Cut Filter**	Yes
Focal Length	5.2mm – 148.15mm	**IR Range**	100m / 328ft
Aperture	F1.3 – F4.8	**Minimum Illumination**	0.8 lux @ F1.4 (Color) 0 lux @ F1.4 with IR Illuminators on
Iris	DC Iris	**Onboard Storage**	Capacity: From 512GB to 3TB Card: MicroSD, SDXC
Field of View (after LDC[2]**)**	Horizontal: 55°–2° Vertical: 42°–1.5° Diagonal: 66°–2.5°	**CPU**	Ambarella CV22S66
Sensor Movement	Tilt: 220° Pan: 360°		

Standard video settings

Compression	H.265 (historical video only), H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[3]	24fps	**WDR Technology**	True WDR, dual exposure
Live Streaming Settings[4]	Static: 1,000 Kbps (SQ), 3,000 Kbps (HQ) Moving: 2,000 Kbps (SQ), 4,500 Kbps (HQ)		

Standard audio settings

Audio	Not supported

Power and network

Power Input[5]	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++	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 / 1000 Mbps
Power Consumption[5]	With IR: 43-57V, 1.00-0.74A, 42.3W Without IR: 43-57V, 0.55-0.41A, 23.3W Extended temperature range: 43-57V, 1.04-0.77A, 44.0W	**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.
5. The listed ranges represent the uplink bandwidth based on target bitrates. To learn more, visit Verkada's Knowledge Base and read "Understanding Variable Bitrates for Verkada PTZ Cameras".

Tech Specs

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**	5 Years
Certifications	FCC, IC, UL, CB, CE, UKCA, Japan VCCI, AS/NZS (RCM), IK10 impact rating, IP66 weather rating	**Included Accessories**	Rubber cap, pendant cap, T30 security L-wrench

Mechanical

Weight	Camera: 7.07kg / 15.6lbs Pendant cap: 0.41kg / 0.9lbs	**Body**	Aluminum, plastic
Dimensions	Ø: 256.0mm / 10.08in, H: 406.0mm / 15.98in with pendant cap Ø: 256.0mm / 10.08in, H: 336.0mm / 13.23in without pendant cap		

Dimensions

256. mm / 10.08in

406.0mm / 15.98in

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, fast archive
People Analytics	People search, attribute search, face search, Sentry Mode, motion search, trajectory analysis, selective face blurring	**Sharing and Privacy**	Live Links, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis	**Controllers[6]**	Mouse, keyboard, Xbox Wireless Controller, joystick

Coverage examples

360° pan

220° tilt

6. For details on the supported controllers for the CP63-E, refer to the article here.

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Tech Specs

Camera features

Image Sensor	1 / 1.8" Progressive CMOS	**Shutter Speed**	1 / 30 sec. to 1 / 10,000 sec.
Sensor Resolution[1]	4K (3840 x 2160)	**Day/Night**	IR-cut filter for day and night function
Lens Type	Varifocal; motorized zoom	**IR Cut Filter**	Yes
Focal Length	6.5mm – 212mm	**IR Range**	100m / 328ft
Aperture	F1.4 – F4.9	**Minimum Illumination**	0.02 lux @ F1.4 (Color) 0 lux @ F1.4 with IR Illuminators on
Iris	P-Iris	**Onboard Storage**	Capacity: from 1TB to 3TB Card: MicroSD, SDXC
Field of View	Horizontal: 64° - 2° Vertical: 37° - 1° Diagonal: 71° - 2°	**CPU**	Ambarella CV72S66
Sensor Movement	Tilt: 220° Pan: 360°		

Standard video settings

Compression	H.265 (historical video only), H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[2]	24fps	**Live Streaming Settings[3]**	Static: 1,000 Kbps (SQ), 3,000 Kbps (HQ) Moving: 3,000 Kbps (SQ), 5,000 Kbps (HQ)

Standard audio settings

Audio	Not supported

Power and network

Power Input[4]	With IR: IEEE 802.3bt Type 3 PoE++ Without IR: IEEE 802.3bt Type 3 PoE++ Extended temperature range: IEEE 802.3bt Type 3 PoE++	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 / 1000 Mbps
Power Consumption[4]	With IR: 43-57V, 1.13-0.85A, 48.0W Without IR: 43-57V, 0.80-0.60A, 34.0W Extended temperature range: 43-57V, 1.20-0.89A, 51.0W	**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. Frame rate can be adjusted by support.
3. The listed ranges represent the uplink bandwidth based on target bitrates. To learn more, visit Verkada's Knowledge Base and read "Understanding Variable Bitrates for Verkada PTZ Cameras".
4. Extended temperature range includes operating temperatures below -8.5°C / 16.7°F and assumes IR will be enabled.

CP63-E-F
Tech Specs

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**	5 Years
Certifications	FCC, IC, CE, UKCA, Japan VCCI, AS/NZS (RCM), IK10 impact rating, IP66 weather rating, FIPS 140-2 validated, TAA and FY2019 NDAA compliant	**Included Accessories**	Rubber cap, pendant cap, T30 security L-wrench

Mechanical

Weight	Camera: 7.53kg / 16.6lbs Pendant cap: 0.41kg / 0.9lbs	**Body**	Aluminum, plastic, glass
Dimensions	Ø: 256.0mm / 10.08in, H: 406.0mm / 15.98in with pendant cap Ø: 256.0mm / 10.08in, H: 336.0mm / 13.23in without pendant cap		

Dimensions

256.0mm / 10.08in

406.0 mm / 15.98 in

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, footage archiving
People Analytics	People search, attribute search, face search, Sentry Mode, motion search, trajectory analysis, selective face blurring	**Sharing and Privacy**	Live links, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis	**Controllers[5]**	Mouse, keyboard, Xbox Wireless Controller, joystick

Coverage examples

360° pan

220° tilt

5. For details on the supported controllers for the CP63-E-F, refer to the article here.

Ordering Information

Indoor FIPS-Validated Dome Series pricing

Model Number	MP[1]	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention[1]	People/ Vehicle Analytics	Cost (MSRP) USD
CD42-256-HW-F	5MP	✓	Fixed	15m / 49ft	256GB	30 Days	✓	$1,199
CD42-512-HW-F	5MP	✓	Fixed	15m / 49ft	512GB	60 Days	✓	$1,599
CD42-768-HW-F	5MP	✓	Fixed	15m / 49ft	768GB	90 Days	✓	$1,999
CD42-1TB-HW-F	5MP	✓	Fixed	15m / 49ft	1TB	120 Days	✓	$2,399
CD42-2TB-HW-F	5MP	✓	Fixed	15m / 49ft	2TB	365 Days	✓	$3,699
CD52-256-HW-F	5MP	✓	Zoom	30m / 98ft	256GB	30 Days	✓	$1,399
CD52-512-HW-F	5MP	✓	Zoom	30m / 98ft	512GB	60 Days	✓	$1,799
CD52-768-HW-F	5MP	✓	Zoom	30m / 98ft	768GB	90 Days	✓	$2,199
CD52-1TB-HW-F	5MP	✓	Zoom	30m / 98ft	1TB	120 Days	✓	$2,599
CD52-2TB-HW-F	5MP	✓	Zoom	30m / 98ft	2TB	365 Days	✓	$3,899

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

Ordering Information

Outdoor FIPS-Validated Dome Series pricing

Model Number	MP[1]	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention[1]	People/ Vehicle Analytics	Cost (MSRP) USD
CD42-256E-HW-F	5MP	✓	Fixed	15m / 49ft	256GB	30 Days	✓	$1,399
CD42-512E-HW-F	5MP	✓	Fixed	15m / 49ft	512GB	60 Days	✓	$1,799
CD42-768E-HW-F	5MP	✓	Fixed	15m / 49ft	768GB	90 Days	✓	$2,199
CD42-1TBE-HW-F	5MP	✓	Fixed	15m / 49ft	1TB	120 Days	✓	$2,599
CD42-2TBE-HW-F	5MP	✓	Fixed	15m / 49ft	2TB	365 Days	✓	$3,899
CD52-256E-HW-F	5MP	✓	Zoom	30m / 98ft	256GB	30 Days	✓	$1,599
CD52-512E-HW-F	5MP	✓	Zoom	30m / 98ft	512GB	60 Days	✓	$1,999
CD52-768E-HW-F	5MP	✓	Zoom	30m / 98ft	768GB	90 Days	✓	$2,399
CD52-1TBE-HW-F	5MP	✓	Zoom	30m / 98ft	1TB	120 Days	✓	$2,799
CD52-2TBE-HW-F	5MP	✓	Zoom	30m / 98ft	2TB	365 Days	✓	$4,099

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

Ordering Information

FIPS-Validated Bullet Series pricing

Model Number	MP[1]	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention[1]	People/ Vehicle Analytics	Cost (MSRP) USD
CB52-256E-HW-F	5MP	✓	Zoom	30m / 98ft	256GB	30 Days	✓	$1,599
CB52-512E-HW-F	5MP	✓	Zoom	30m / 98ft	512GB	60 Days	✓	$1,999
CB52-768E-HW-F	5MP	✓	Zoom	30m / 98ft	768GB	90 Days	✓	$2,399
CB52-2TBE–HW-F	5MP	✓	Zoom	30m / 98ft	2TB	365 Days	✓	$4,099
CB52-256TE–HW-F	5MP	✓	Zoom	50m / 164ft	256GB	30 Days	✓	$1,699
CB52-512TE–HW-F	5MP	✓	Zoom	50m / 164ft	512GB	60 Days	✓	$2,099
CB52-768TE–HW-F	5MP	✓	Zoom	50m / 164ft	768GB	90 Days	✓	$2,499
CB52-2TBTE–HW-F	5MP	✓	Zoom	50m / 164ft	2TB	365 Days	✓	$4,199
CB62-512E–HW-F	4K	✓	Zoom	30m / 98ft	512GB	30 Days	✓	$1,999
CB62-1TBE-HW-F	4K	✓	Zoom	30m / 98ft	1TB	60 Days	✓	$2,799
CB62-2TBE-HW-F	4K	✓	Zoom	30m / 98ft	2TB	90 Days	✓	$4,099
CB62-512TE-HW-F	4K	✓	Zoom	50m / 164ft	512GB	30 Days	✓	$2,099
CB62-1TBTE-HW-F	4K	✓	Zoom	50m / 164ft	1TB	60 Days	✓	$2,899
CB62-2TBTE-HW-F	4K	✓	Zoom	50m / 164ft	2TB	90 Days	✓	$4,199

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

Ordering Information

FIPS-Validated Multisensor pricing

Model Number	MP[1]	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention[1]	People/ Vehicle Analytics	Cost (MSRP) USD
CH52-1TBE-F	20MP	✓	Zoom	30m / 98ft	1TB	30 Days	✓	$4,099
CH52-2TBE-F	20MP	✓	Zoom	30m / 98ft	2TB	60 Days	✓	$5,399
CH52-4TBE-F	20MP	✓	Zoom	30m / 98ft	4TB	120 Days	✓	$7,999
CH52-8TBE-F	20MP	✓	Zoom	30m / 98ft	8TB	365 Days	✓	$13,199

FIPS-Validated PTZ camera pricing

Model Number	MP[1]	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention[1]	People/ Vehicle Analytics	Cost (MSRP) USD
CP52-512E-F	5MP	✓	Zoom	100m / 328ft	512GB	30 Days	✓	$4,199
CP52-1TBE-F	5MP	✓	Zoom	100m / 328ft	1TB	60 Days	✓	$4,999
CP52-1P5TBE-F	5MP	✓	Zoom	100m / 328ft	1.5TB	90 Days	✓	$5,799
CP52-3TBE-F	5MP	✓	Zoom	100m / 328ft	3TB	180 Days	✓	$7,399
CP63-1TBE-HW-F	4K	✓	Zoom	100m / 328ft	1 TB	30 days	✓	$5,199
CP63-2TBE-HW-F	4K	✓	Zoom	100m / 328ft	2 TB	60 Days	✓	$6,499
CP63-3TBE-HW-F	4K	✓	Zoom	100m / 328ft	3 TB	90 Days	✓	$7,799

FIPS-Validated Fisheye camera pricing

Model Number	MP[1]	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention[1]	People/ Vehicle Analytics	Cost (MSRP) USD
CF83-1TBE-HW-F	12.5MP	✓	Fixed	20m / 66ft	512GB	30 days	✓	$1,999
CF83-2TBE-HW-F	12.5MP	✓	Fixed	20m / 66ft	1TB	60 days	✓	$2,799
CF83-3TBE-HW-F	12.5MP	✓	Fixed	20m / 66ft	2TB	90 days	✓	$4,099
CF83-512E-HW-F	12.5MP	✓	Fixed	20m / 66ft	3TB	120 days	✓	$5,399

Ordering Information

Video Security Cloud License (New/Capacity Increase)

Model Number	Description	Cost (MSRP) USD
LIC-CAM-1Y-CAP	1-Year Camera License, Capacity Increase	$199
LIC-CAM-3Y-CAP	3-Year Camera License, Capacity Increase	$549
LIC-CAM-5Y-CAP	5-Year Camera License, Capacity Increase	$899
LIC-CAM-10Y-CAP	10-Year Camera License, Capacity Increase	$1,799
LIC-CH52-1Y-CAP	1-Year CH52 Multisensor Camera License, Capacity Increase	$599
LIC-CH52-3Y-CAP	3-Year CH52 Multisensor Camera License, Capacity Increase	$1,649
LIC-CH52-5Y-CAP	5-Year CH52 Multisensor Camera License, Capacity Increase	$2,699
LIC-CH52-10Y-CAP	10-Year CH52 Multisensor Camera License, Capacity Increase	$5,399
LIC-CAM-1Y-CAP-G	1-Year Camera License for Government, Capacity Increase	$299
LIC-CAM-3Y-CAP-G	3-Year Camera License for Government, Capacity Increase	$799
LIC-CAM-5Y-CAP-G	5-Year Camera License for Government, Capacity Increase	$1,349
LIC-CAM-10Y-CAP-G	10-Year Camera License for Government, Capacity Increase	$2,699
LIC-CH52-1Y-CAP-G	1-Year CH52 Multisensor Camera License for Government, Capacity Increase	$899
LIC-CH52-3Y-CAP-G	3-Year CH52 Multisensor Camera License for Government, Capacity Increase	$2,474
LIC-CH52-5Y-CAP-G	5-Year CH52 Multisensor Camera License for Government, Capacity Increase	$4,049
LIC-CH52-10Y-CAP-G	10-Year CH52 Multisensor Camera License for Government, Capacity Increase	$8,099

Ordering Information

Video Security Cloud License (Renewal)

Model Number	Description	Cost (MSRP) USD
LIC-CAM-1Y-RNW	1-Year Camera License, Renewal	$199
LIC-CAM-3Y-RNW	3-Year Camera License, Renewal	$549
LIC-CAM-5Y-RNW	5-Year Camera License, Renewal	$899
LIC-CAM-10Y-RNW	10-Year Camera License, Renewal	$1,799
LIC-CH52-1Y-RNW	1-Year CH52 Multisensor Camera License, Renewal	$599
LIC-CH52-3Y-RNW	3-Year CH52 Multisensor Camera License, Renewal	$1,649
LIC-CH52-5Y-RNW	5-Year CH52 Multisensor Camera License, Renewal	$2,699
LIC-CH52-10Y-RNW	10-Year CH52 Multisensor Camera License, Renewal	$5,399
LIC-CAM-1Y-RNW-G	1-Year Camera License for Government, Renewal	$299
LIC-CAM-3Y-RNW-G	3-Year Camera License for Government, Renewal	$799
LIC-CAM-5Y-RNW-G	5-Year Camera License for Government, Renewal	$1,349
LIC-CAM-10Y-RNW-G	10-Year Camera License for Government, Renewal	$2,699
LIC-CH52-1Y-RNW-G	1-Year CH52 Multisensor Camera License for Government, Renewal	$899
LIC-CH52-3Y-RNW-G	3-Year CH52 Multisensor Camera License for Government, Renewal	$2,474
LIC-CH52-5Y-RNW-G	5-Year CH52 Multisensor Camera License for Government, Renewal	$4,049
LIC-CH52-10Y-RNW-G	10-Year CH52 Multisensor Camera License for Government, Renewal	$8,099

Ordering Information

Accessories pricing

Model Number	Description	Cost (MSRP) USD
ACC-CAM-SHIELD-1	Camera Weather Shield	$79
ACC-MNT-ANGLE-1	Angle Mount	$149
ACC-MNT-ARM-1	Arm Mount	$99
ACC-MNT-CJBOX-1	Circle Junction Box	$109
ACC-MNT-CLIP-1	Tile Clip Mount	$99
ACC-MNT-CORNER-1	Corner Mount	$199
ACC-MNT-LBRAC-1	L-Bracket Mount	$129
ACC-MNT-PEND-1	Standard Pendant Cap	$69
ACC-MNT-POLE-1	Pole Mount	$209
ACC-MNT-REC-2	Recess Ceiling Mount	$149
ACC-MNT-SJBOX-1	Square Junction Box	$89
ACC-MNT-UPEND-1	Umbrella Pendant Cap	$79
ACC-MNT-XLARM-1	Large Arm Mount	$159
INJ-POE-PLUS	PoE Plus (802.3at Type 2) Injector, GigE	$129
ACC-POE-90W-AU	90W PoE++ (802.3bt Type 4) Injector, GigE, Indoor, Australia Type I Plug	$169
ACC-POE-90W-EU	90W PoE++ (802.3bt Type 4) Injector, GigE, Indoor, Europe Type F Plug	$169
ACC-POE-90W-NA	90W PoE++ (802.3bt Type 4) Injector, GigE, Indoor, North America Type B Plug	$169
ACC-POE-90W-UK	90W PoE++ (802.3bt Type 4) Injector, GigE, Indoor, United Kingdom Type G Plug	$169