

CP52-E

Total Control at Your Fingertips With PTZ Technology



Overview

Verkada's CP52-E pan-tilt-zoom (PTZ) camera gives operators control over the camera's field of view, enabling dynamic monitoring of large areas. Equipped with a 5MP image sensor, the CP52-E boasts broad 360-degree pan and 220-degree tilt capabilities. Operators can use this camera to investigate moving subjects and capture comprehensive footage as events unfold across vast spaces, all with remarkably low-latency (<500 milliseconds). Additionally, the CP52-E features 28x optical zoom to capture finer details of the scene. With an infrared range (IR) of 100m / 328ft, the CP52-E delivers excellent detail even in low-light conditions.

The CP52-E camera is designed with a turret style to optimize usability. It incorporates advanced motor mechanisms that allow for quick and seamless transitions between positions, providing operators with smooth and effective control.¹ The turret design also enhances its range of motion, offering more degrees of freedom and effectively reducing blind spots.

The CP52-E is IP66 weather rated for highly-exposed outdoor installations. The exterior housing provides IK10 protection against direct impacts from vandals, hail and flying debris. Like all Verkada cameras, the CP52-E works out-of-the-box without any additional configurations. All CP52-E cameras come with a 5-year warranty.

Key features

Coverage

- 5MP high-definition image resolution
- 28x optical zoom
- 360° pan, 220° tilt
- 100m / 328ft IR illumination

Storage and processing

- 512GB-3TB of onboard storage
- Up to 180 days of retention in standard quality
- Edge processing for motion, people and vehicle analytics

Sentry Mode

- Automatically capture zoomed high quality images of people
- Specify region of interest for image capture

1. See the Knowledge Base article [here](#) for details on how to use controllers to operate the pan, tilt, and zoom functionalities of the CP52-E.



CP52-E

Tech Specs

Camera features

Image Sensor	1/2.8" Progressive CMOS	Shutter Speed	1/30 sec. to 1/10,000 sec.
Sensor Resolution¹	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 LDC²)	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 Rate³	24fps	WDR Technology	True WDR, dual exposure
Live Streaming Settings⁴	Static: 1,000 Kbps (SQ), 3,000 Kbps (HQ) Moving: 2,000 Kbps (SQ), 4,500 Kbps (HQ)		

Standard audio settings

Audio	Not supported
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Power and network

Power Input⁵	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 Consumption⁵	With IR: 42.5 – 57V, 0.995 – 0.742A, 42.26W Without IR: 42.5 – 57V, 0.547 – 0.408A, 23.26W Extended temperature range: 42.5 – 57V, 1.035 – 0.772A, 44.04W	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](#)".



CP52-E 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: 0.4kg / 0.9lbs	Body	Aluminum, plastic
Dimensions	Ø: 256mm / 10.1in, H: 406mm / 16.0in with pendant cap Ø: 256mm / 10.1in, H: 336mm / 13.2in without pendant cap		

Dimensions



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, AI-powered search	Sharing and Privacy	Live Links, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, AI-powered search	Controllers⁶	Mouse, keyboard, Xbox Wireless Controller, joystick

Coverage examples



6. For details on the supported controllers for the CP63-E, refer to the article [here](#).



Ordering Information

CP52-E pricing

Model Number	MP ¹	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention ¹	People/Vehicle Analytics	Cost (MSRP) ^{USD}
CP52-512E-HW	5.0MP	✓	Zoom	100m / 328ft	512GB	30 Days	✓	\$3,699
CP52-1TBE-HW	5.0MP	✓	Zoom	100m / 328ft	1TB	60 Days	✓	\$4,499
CP52-1P5TBE-HW	5.0MP	✓	Zoom	100m / 328ft	1.5TB	90 Days	✓	\$5,299
CP52-3TBE-HW	5.0MP	✓	Zoom	100m / 328ft	3TB	180 Days	✓	\$6,899

Video Security Cloud License pricing

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

Accessories pricing

ACC-MNT-XLARM-1	Large Arm Mount	\$159
ACC-MNT-POLE-1	Pole Mount	\$209
ACC-MNT-CORNER-1	Corner Mount	\$199
ACC-POE-60W	PoE++ (802.3bt) Injector, GigE	\$149

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