FIPS-Validated PTZ

Total Control at Your Fingertips With PTZ Technology

Overview

Verkada's FIPS-validated CP52-E-F pan-tilt-zoom (PTZ) camera gives operators control over the camera's field of view, enabling dynamic monitoring of large areas, and incorporates encryption that meets FedRAMP Moderate Ready and FIPS 140-2 standards. Equipped with a 5MP image sensor, the CP52-E-F boasts broad 360-degree pan and 220-degree tilt capabilities. Operators can use this camera's Sentry Mode to automatically follow and investigate moving subjects and capture comprehensive footage as events unfold across large spaces, all with low latency. Additionally, the CP52-E-F features 28x optical zoom to capture finer details of the scene. With an infrared range (IR) of 100m / 328ft, the CP52-E-F delivers excellent detail even in low-light conditions. The CP52-E-F will run FIPS encryption in transit and at rest by default, with no additional settings or configuration required. It is also TAA and FY2019 NDAA compliant.

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

The CP52-E-F is IP66 weather rated for 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-F works out–of–the–box without the need for 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

Sentry Mode

- Automatically capture zoomed high quality images of people
- Pair the PTZ with one or more "context cameras" to trigger Sentry Mode before the subject enters the PTZ's field of view

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

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

PTZ camera
Tech Specs

CP52-E-F

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**	0.04 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: 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".

PTZ camera
Tech Specs

CP52-E-F

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, FIPS 140-2 validated, TAA and FY2019 NDAA compliant	**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

256mm / 10.1in

406mm / 16.0in

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	**Controllers**	Mouse, keyboard, Xbox Wireless Controller, joystick

Coverage examples

360° pan

220° tilt

Ordering Information

FIPS PTZ 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	5.0MP	✓	Zoom	100m / 328ft	512GB	30 Days	✓	$4,199
CP52-1TBE-F	5.0MP	✓	Zoom	100m / 328ft	1TB	60 Days	✓	$4,999
CP52-1P5TBE-F	5.0MP	✓	Zoom	100m / 328ft	1.5TB	90 Days	✓	$5,799
CP52-3TBE-F	5.0MP	✓	Zoom	100m / 328ft	3TB	180 Days	✓	$7,399

Video Security Cloud License pricing

Model Number	Description	Cost (MSRP) USD
LIC-CAM-1Y	1–Year Camera License	$199
LIC-CAM-1Y	3–Year Camera License	$549
LIC-CAM-5Y	5–Year Camera License	$899
LIC-CAM-10Y	10–Year Camera License	$1,799
LIC-CAM-1Y-G	1-Year Camera License for Government	$299
LIC-CAM-3Y-G	3-Year Camera License for Government	$799
LIC-CAM-5Y-G	5-Year Camera License for Government	$1,349
LIC-CAM-10Y-G	10-Year Camera License for Government	$2,699

Accessories pricing

Model Number	Description	Cost (MSRP) USD
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

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