

## CD52-F Government-Grade Indoor Dome Camera

### Reliable 5MP Coverage for Detailed Visibility in Indoor Government Spaces



#### Overview

The CD52-F government-grade dome camera provides precise 5MP coverage in a variety of indoor environments. With a 1/2.8" progressive CMOS image sensor, varifocal lens with 2.86x optical zoom, and 30 meters / 98 feet of IR range, the CD52-F ensures clear and consistent image quality in a variety of lighting conditions. The CD52-F also includes FIPS 140-validated encryption and is both TAA and FY2019 NDAA compliant – essential compliance criteria for government-grade deployments. The CD52-F is compatible with the standard Verkada Command platform, as well as Command for GovCloud, Verkada’s FedRAMP® Moderate Authorized environment.

The CD52-F includes an onboard CV25S Ambarella processor to support advanced analytics like AI-powered search, line crossing, loitering, and Person of Interest (POI) alerts. The CD52-F excels at covering large indoor spaces like hallways and manufacturing floors where high walls and ceilings make capturing the desired scene otherwise challenging. The camera’s optical zoom capabilities ensure that picture quality is maintained when viewing areas of interest from further distances.

The CD52-F’s sleek design and IK08 impact rating enable organizations to deploy a durable, tamper-resistant camera while also keeping aesthetics top-of-mind. Installation is simple and intuitive, and setup is easy to track with an LED status indicator. The included mount plate allows the camera to be mounted to a wall or ceiling without any additional hardware, while the built-in microphone can be enabled to capture audio.

#### Key features

##### Excellent image quality

- 1/2.8" progressive CMOS image sensor
- 5MP resolution
- Varifocal lens with 2.86x optical zoom
- 30 meters / 98 feet of IR range for extensive nighttime visibility

##### Government-grade security

- Meets the FIPS 140 standard, as validated by NIST
- FedRAMP Ready status at the Moderate impact level as designated by the Federal Risk and Authorization Management Program
- TAA and FY2019 NDAA compliant

##### Advanced analytics

- Onboard CV25S Ambarella processor enables people and vehicle analytics
- Person of Interest (POI) alerts for proactive monitoring

##### Hybrid cloud architecture

- Onboard storage and processing for reduced bandwidth consumption and coverage at scale
- 30 - 365 days (256GB - 2TB) of onboard storage
- Redundant cloud backup and unlimited cloud-based archiving of footage



## CD52-F Tech Specs

### Camera features

<b>Image Sensor</b>	1/2.8" Progressive CMOS	<b>Shutter Speed</b>	1/30 sec. to 1/10,000 sec.
<b>Sensor Resolution<sup>1</sup></b>	5MP (2688 x 1944)	<b>Day/Night</b>	IR-cut filter for day and night function
<b>Lens Type</b>	Varifocal; motorized zoom	<b>IR Cut Filter</b>	Yes
<b>Focal Length</b>	2.8-8mm	<b>IR Range</b>	30m / 98ft
<b>Aperture</b>	F1.3 - F2.4	<b>Minimum Illumination</b>	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
<b>Iris</b>	P-Iris	<b>Onboard Storage</b>	Capacity: From 256GB to 2TB Card: MicroSD, SDXC
<b>Field of View (after LDC<sup>2</sup>)</b>	Horizontal: 105° - 38° (84° - 37°) Vertical: 77° - 29° (68° - 28°) Diagonal: 126° - 48° (97° - 45°)	<b>CPU</b>	Ambarella CV25S88
<b>Sensor Movement</b>	Tilt: 60° Pan: 355° Rotation: 350°		

### Standard video settings

<b>Compression</b>	H.265, H.264	<b>Historical Video Settings</b>	Adaptive quality <sup>1</sup>
<b>Frame Rate<sup>3</sup></b>	24fps	<b>Live Streaming Settings</b>	High quality (HQ): Up to 3,000 Kbps (default) Standard quality (SQ): Up to 600 Kbps

### Standard audio settings

<b>Audio</b>	Supported	<b>Interface</b>	Built-in microphone
<b>Audio Capacity</b>	One-way audio	<b>Effective Range</b>	5m / 15ft

### Power and network

<b>Power Input<sup>4</sup></b>	With IR: IEEE 802.3af Type 1 PoE Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: N/A	<b>Connectivity</b>	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
<b>Power Consumption<sup>4</sup></b>	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	<b>RTSP</b>	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 -10°C / 14°F and assumes IR will be enabled.



# CD52-F Tech Specs

## General

<b>Operating Temperature</b>	-10°C to 50°C / 14°F to 122°F	<b>LED Indicator</b>	System power and status indicator
<b>Humidity</b>	0 to 90%	<b>Warranty</b>	10 Years
<b>Certifications</b>	FCC, ICES, CE, UL, CB, NOM, KCC, IK08 impact rating, FIPS 140-2, TAA compliant	<b>Included Accessories</b>	Setup guide, T10 security torx screwdriver, screw pack, mounting template

## Mechanical

<b>Weight</b>	Camera: 776g / 29.88oz Mount plate: 140g / 4.94oz	<b>Body</b>	Aluminum, plastic dome trim
<b>Dimensions</b>	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



## Software capabilities

<b>Alerts</b>	Camera status, motion detection, people detection, vehicle detection, Person of Interest detection, crowd detection, line-crossing detection, loitering detection, AI-powered alerts	<b>Streaming and Storage</b>	Cloud backup, configurable retention days, selectable storage location, low bandwidth mode, timelapse, RTSP
<b>People Analytics</b>	People search, attribute search, face search, occupancy trends, motion search, trajectory analysis, selective face blurring, AI-powered search	<b>Sharing and Privacy</b>	Live links, live face blur, privacy regions, audit log
<b>Vehicle Analytics</b>	Vehicle search, attribute search, motion search, trajectory analysis, occupancy trends, AI-powered search		



## Product information

### CD52-F models

Model Number	MP <sup>1</sup>	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention <sup>1</sup>	People/Vehicle Analytics
CD52-256-HW-F	5MP	✓	Zoom	30m / 98ft	256GB	30 Days	✓
CD52-512-HW-F	5MP	✓	Zoom	30m / 98ft	512GB	60 Days	✓
CD52-768-HW-F	5MP	✓	Zoom	30m / 98ft	768GB	90 Days	✓
CD52-1TB-HW-F	5MP	✓	Zoom	30m / 98ft	1TB	120 Days	✓
CD52-2TB-HW-F	5MP	✓	Zoom	30m / 98ft	2TB	365 Days	✓

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>