

## CD53-E Outdoor Dome Camera

# Reliable 5MP Coverage for Detailed Monitoring of Outdoor Environments



### Overview

The CD53-E dome camera provides precise 5MP coverage in a range of outdoor 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 CD53-E offers consistent image quality in inclement weather and varying lighting conditions. The CD53-E includes an onboard CV75S Ambarella processor to support advanced analytics like AI-powered search, [Occupancy Trends](#), line crossing, loitering, and Person of Interest (POI) alerts. The CD53-E excels at covering large outdoor areas such as busy intersections, public courtyards, outdoor transit hubs, and exposed subway platforms – serving as a dependable camera for enterprise deployments where detailed people and vehicle capture at distance is critical to expedite investigations.

Engineered for challenging outdoor environments, the CD53-E's IP66/67 weather and IK10 impact ratings enable the device to withstand harsh conditions. Its in-house design promotes a seamless installation experience, featuring captive screws that remain attached to the mounting plate, a latch-based cable gland for easy PoE threading, a three-LED status light indicator, and a built-in bubble level to help ensure precise alignment.

### 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

#### Advanced analytics

- Onboard CV75S Ambarella processor for advanced people and vehicle analytics
- AI-powered search and AI-powered alerts
- Occupancy Trends for operational insights

#### Durability and weather protection

- IP66/67 weather rating
- IK10 impact rating
- Operability between -40°C to 50°C / -40°F to 122°F

#### 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

#### Streamlined installation

- Latch-based cable gland for easy PoE threading
- Captive screws in mounting plate
- Three-LED light status indicator
- Built-in bubble level
- Physical and digital mute switches to easily enable or disable audio



## CD53-E 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: 109° - 39° (91° - 36°) Vertical: 80° - 29° (71° - 28°) Diagonal: 140° - 48° (107° - 44°)	<b>CPU</b>	Ambarella CV75S88
<b>Sensor Movement</b>	Tilt: 60° Pan: 360° 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 / 16ft

### Power and network

<b>Power Input<sup>4</sup></b>	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+	<b>Connectivity</b>	RJ-45 cable connector for network/PoE connection; 10 / 100 / 1000 Mbps
<b>Power Consumption<sup>4</sup></b>	With IR: 37V-57V, 0.39A-0.29A, 16.8W Without IR: 37V-57V, 0.23A-0.15A, 8.5W Extended temperature range: 37V-57V, 0.48A-0.35A, 20.2W	<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.



# CD53-E Tech Specs

## General

<b>Operating Temperature</b>	-40°C to 50°C / -40°F to 122°F	<b>LED Indicator</b>	System power, status indicator and debug indicator
<b>Humidity</b>	0 to 90%	<b>Warranty</b>	10 Years
<b>Certifications</b>	FCC, ICES, UKCA, CE, RCM, NOM, VCCI, ICASA, IK10 impact rating, IP66/67 weather rating, Compliant to UL 2043	<b>Included Accessories</b>	Screw packs, mount plate with leveler, cable sealing rubber for 6.5-7.5mm, conduit adapter, T10 security driver, desiccant 4.5g

## Mechanical

<b>Weight</b>	Camera: 1137g / 40.11oz Mount plate: 193g / 6.81oz	<b>Body</b>	Aluminum, plastic dome trim
<b>Dimensions</b>	Ø: 155.0mm / 6.10in, H: 111.4mm / 4.39in with mount plate Ø: 155.0mm / 6.10in, H: 104.4mm / 4.11in 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		