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

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

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 / 1000 Mbps
Power Consumption[4]	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	**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 -10°C / 14°F and assumes IR will be enabled.
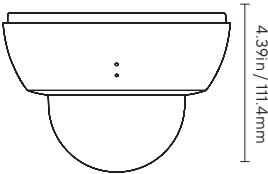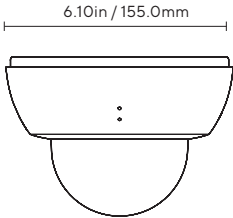
CD53–E
Tech Specs

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, UKCA, CE, RCM, NOM, VCCI, ICASA, IK10 impact rating, IP66/67 weather rating, Compliant to UL 2043	**Included Accessories**	Screw packs, mount plate with leveler, cable sealing rubber for 6.5-7.5mm, conduit adapter, T10 security driver, desiccant 4.5g

Mechanical

Weight	Camera: 1137g / 40.11oz Mount plate: 193g / 6.81oz	**Body**	Aluminum, plastic dome trim
Dimensions	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

6.10in / 155.0mm

4.39in / 111.4mm

Software capabilities

Alerts	Camera status, motion detection, people detection, vehicle detection, Person of Interest detection, crowd detection, line-crossing detection, loitering detection, AI-powered alerts	**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, AI-powered search	**Sharing and Privacy**	Live Links, live face blur, privacy regions, audit log
Vehicle Analytics	Vehicle search, attribute search, motion search, trajectory analysis, Occupancy Trends, AI-powered search		

Ordering Information

CD53-E pricing

Model Number	MP[1]	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention[1]	People/ Vehicle Analytics	Cost (MSRP) USD
CD53-256E-HW	5MP	✓	Zoom	30m / 98ft	256GB	30 Days	✓	$1,399
CD53-512E-HW	5MP	✓	Zoom	30m / 98ft	512GB	60 Days	✓	$1,799
CD53-768E-HW	5MP	✓	Zoom	30m / 98ft	768GB	90 Days	✓	$2,199
CD53-1TBE-HW	5MP	✓	Zoom	30m / 98ft	1TB	120 Days	✓	$2,599
CD53-2TBE-HW	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

Video Security Cloud License pricing (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

Video Security Cloud License pricing (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

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-UPEND-1	Umbrella Pendant Cap	$79
INJ-POE-PLUS	PoE Plus (802.3at Type 2) Injector, GigE	$129

Ordering Information

Viewing Station pricing

Model Number	Description	Cost (MSRP) USD
VX52-HW	VX52 Viewing Station	$499

Viewing Station License pricing (New/Capacity Increase)

Model Number	Description	Cost (MSRP) USD
LIC-VX-1Y-CAP	1-Year Viewing Station License, Capacity Increase	$499
LIC-VX-3Y-CAP	3-Year Viewing Station License, Capacity Increase	$1,299
LIC-VX-5Y-CAP	5-Year Viewing Station License, Capacity Increase	$1,999
LIC-VX-10Y-CAP	10-Year Viewing Station License, Capacity Increase	$3,999

Viewing Station License pricing (Renewal)

Model Number	Description	Cost (MSRP) USD
LIC-VX-1Y-RNW	1-Year Viewing Station License, Renewal	$499
LIC-VX-3Y-RNW	3-Year Viewing Station License, Renewal	$1,299
LIC-VX-5Y-RNW	5-Year Viewing Station License, Renewal	$1,999
LIC-VX-10Y-RNW	10-Year Viewing Station License, Renewal	$3,999