

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 Al-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
- Al-powered search and Al-powered alerts
- Occupancy Trends for operational insights

Durability and weather protection

- IP66/67 weather rating
- IK10 impact rating
- \bullet 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

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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°)	СРИ	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 Consumption⁴	With IR: 37V-57V, 0.39A-0.29A, 16.8W Without IR: 37V-57V, 0.23A-0.15A, 8.5W	RTSP	RTSP 1.0 RFC 2326
	Extended temperature range: 37V-57V, 0.48A-0.35A, 20.2W		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

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 $^{2. \,} Lens\, Distortion\, Correction\, (LDC)\, crops\, the\, sensor\, field\, of\, view\, to\, deliver\, a\, rectified,\, undistorted\, output\, image.$

^{3.} Frame rate can be adjusted by support.

 $^{4. \, \}text{Extended temperature range includes operating temperatures below -} 10\,^{\circ}\text{C} \, / \, 14\,^{\circ}\text{F and assumes IR will be enabled.}$



CD53-E

Tech Specs

General

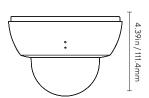
Operating Temperature	-40°C to 50°C / -40°F to 122°F	LED Indicator	System power, status indicator and debug indicator
Humidity	0 to 90%	Warranty	10 Years
Certifications	FCC, ICES, UKCA, CE, RCM, NOM, VCCI, ICASA, IK10 impact rating, IP66/67 weather rating, Compliant to UL 2043	Included Accessories	Screw 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





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, Al-powered search		

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