CD42-E Outdoor Dome Camera

Reliable 5MP Coverage for Extensive Visibility in Outdoor Environments

Overview

The CD42-E outdoor dome camera – the backbone of outdoor enterprise fleet deployments – features a 1 / 2.8" progressive CMOS image sensor and 15 meters / 49 feet of IR range to provide extensive 5MP coverage in a variety of lighting conditions and inclement weather. The CD42-E includes an onboard CV25S Ambarella processor for advanced analytics like AI-powered search, Occupancy Trends, line crossing, loitering, and Person of Interest (POI) alerts. Ideal for covering locations such as exterior corridors and parking lots, the CD42-E provides privacy-sensitive coverage of outdoor spaces with detailed people and vehicle analytics without sacrificing image quality.

Certified with IP67 weather and IK10 impact ratings, the CD42-E is designed to withstand extreme temperatures and excessive precipitation without compromising aesthetics. Installation and setup are easy to track using the LED status indicator, while the included mount plate makes it straightforward to install the device on exterior walls or flat overhangs.

Key features

Excellent image quality

- 1 / 2.8" progressive CMOS image sensor
- 5MP resolution
- 15 meters / 49 feet of IR range for well-defined nighttime viewing

Durability and weather protection

- IP67 weather rating
- IK10 impact rating
- Operability between -40°C to 50°C / -40°F to 122°F

Easy installation

- Mounting plate and screw pack included
- LED light status indicator
- Digital mute switch to quickly enable or disable audio

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

Advanced analytics

- Onboard CV25S Ambarella processor enables people and vehicle analytics
- AI-powered search and AI-powered alerts
- Occupancy Trends for operational insights

CD42–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	Fixed	**IR Cut Filter**	Yes
Focal Length	2.8mm	**IR Range**	15m / 49ft
Aperture	F1.6	**Minimum Illumination**	0.009 lux @ F1.9 (Color) 0 lux with IR Illuminators on
Iris	Fixed	**Onboard Storage**	Capacity: From 256GB to 2TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 97° (78°) Vertical: 71° (63°) Diagonal: 128° (91°)	**CPU**	Ambarella CV25S88
Sensor Movement	Tilt: 60° Pan: 355° Rotation: 180°		

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 / 15ft

Power and network

Power Input[4]	With IR: IEEE 802.3af Type 1 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 Mbps
Power Consumption[4]	With IR: 37-57V, 0.23-0.15A, 8.6W Without IR: 37-57V, 0.11-0.07A, 4.3W Extended temperature range: 37-57V, 0.46-0.30A, 16.9W	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: Yes

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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.

CD42–E
Tech Specs

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**	10 Years
Certifications	FCC, ICES, CE, UKCA, RCM, VCCI, KCC, BIS, NOM, UL/cUL/IEC 62368-1, CB, IP67 weather rating, IK10 impact rating, FY2019 NDAA compliant	**Included Accessories**	Setup guide, wall mount screws and anchors (4x), T10 security torx screwdriver, mounting template, cable gland wrench, desiccant pack, conduit adapter

Mechanical

Weight	Camera: 847g / 29.88oz Mount plate: 174g / 6.14oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 155.0mm / 6.10in, H: 114.6mm / 4.51in with mount plate Ø: 155.0mm / 6.10in, H: 107.6mm / 4.24in without mount plate		

Dimensions

6.10in / 155.0mm

4.51in / 114.6mm

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		