

CD53 Indoor Dome Camera

Reliable 5MP coverage for detailed monitoring of indoor spaces



Overview

The CD53 dome camera provides 5MP coverage in a range of indoor environments. With a 1 / 2.8" progressive CMOS image sensor, 2.86x optical zoom, and 98 feet / 30 meters of IR range, the CD53 offers consistent image quality in most lighting conditions at long distances. The CD53 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 excels at covering large and busy spaces such as lobbies and high-ceiling atriums, retail outlets, and major transportation hubs – serving as a critical component of enterprise deployments that require detailed face and vehicle capture at distance.

Installation of the CD53 is straightforward and efficient, and setup is easy to monitor with a three-LED status indicator. The included mount plate includes captive screws and a built-in bubble level for precise wall or ceiling installations. The CD53's ground-up design and IK08 impact rating provide a premium, tamper-resistant camera that combines durability with aesthetics.

Key features

Excellent image quality

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

Advanced analytics

- Onboard CV75S Ambarella processor enables enhanced people and vehicle analytics
- AI-powered search and AI-powered alerts
- Occupancy trends for operational insights

Hybrid cloud architecture

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

Streamlined installation

- 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

Tech specs

Camera features

Image sensor	1 / 2.8" progressive CMOS	Shutter speed	1 / 30 sec. to 1 / 10,000 sec.
Sensor resolution¹	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	2.8mm - 8mm	IR range	98ft / 30m
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 LDC²)	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 Rate³	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	16ft / 5m

Power and network

Power input⁴	With IR: IEEE 802.3at Type 2 PoE+ Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: N/A	Connectivity	RJ-45 cable connector for network/PoE connection; 10 / 100 / 1000 Mbps
Power consumption⁴	With IR: 37-57V, 0.39-0.29A, 16.8W Without IR: 37-57V, 0.23-0.15A, 8.5W Extended temperature range: N/A	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 14°F / -10°C and assumes IR will be enabled.



CD53

Tech specs

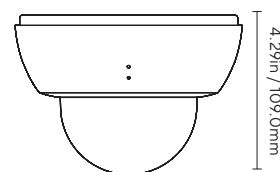
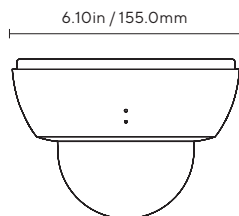
General

Operating temperature	14°F to 122°F / -10°C to 50°C	LED indicators	System power and status indicator, debug indicator
Humidity	0 to 90%	Warranty	10 years
Certifications	FCC, ICES, UKCA, CE, RCM, NOM, VCCI, IK08 impact rating, Compliant to UL 2043	Included accessories	Screw packs, mount plate with leveler, T10 security driver

Mechanical

Weight	Camera: 33.97oz / 963g Mount plate: 6.81oz / 193g	Body	Aluminum, plastic dome trim
Dimensions	Ø: 6.10in / 155.0mm, H: 4.29in / 109.0mm with mount plate Ø: 6.10in / 155.0mm, H: 4.01in / 101.9mm 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, AI-powered search		



Ordering Information

CD53 pricing

Model number	MP ¹	WDR	Lens	IR range	Onboard storage	Maximum SQ onboard retention ¹	People/vehicle analytics	US cost (MSRP) ^{USD}	WW cost (MSRP) ^{USD}
CD53-256-HW	5MP	✓	Zoom	98ft / 30m	256GB	30 Days	✓	\$1,599	\$1,499
CD53-512-HW	5MP	✓	Zoom	98ft / 30m	512GB	60 Days	✓	\$2,299	\$2,199
CD53-768-HW	5MP	✓	Zoom	98ft / 30m	768GB	90 Days	✓	\$2,999	\$2,899
CD53-1TB-HW	5MP	✓	Zoom	98ft / 30m	1TB	120 Days	✓	\$3,699	\$3,599
CD53-2TB-HW	5MP	✓	Zoom	98ft / 30m	2TB	365 Days	✓	\$5,899	\$5,799

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 software license pricing (new/capacity increase)

Model number	Description	US cost (MSRP) ^{USD}	WW cost (MSRP) ^{USD}
LIC-CAM-1Y-CAP	Verkada 1-Year Camera License, Capacity Increase	\$249	\$249
LIC-CAM-3Y-CAP	Verkada 3-Year Camera License, Capacity Increase	\$659	\$659
LIC-CAM-5Y-CAP	Verkada 5-Year Camera License, Capacity Increase	\$1,099	\$1,099
LIC-CAM-10Y-CAP	Verkada 10-Year Camera License, Capacity Increase	\$2,199	\$2,199

Video Security software license pricing (renewal)

Model number	Description	US cost (MSRP) ^{USD}	WW cost (MSRP) ^{USD}
LIC-CAM-1Y-RNW	Verkada 1-Year Camera License, Renewal	\$249	\$249
LIC-CAM-3Y-RNW	Verkada 3-Year Camera License, Renewal	\$659	\$659
LIC-CAM-5Y-RNW	Verkada 5-Year Camera License, Renewal	\$1,099	\$1,099
LIC-CAM-10Y-RNW	Verkada 10-Year Camera License, Renewal	\$2,199	\$2,199



Accessories

Recommended accessories

Model number	Description
ACC-CAM-SHIELD-1	Verkada Camera Weather Shield
ACC-MNT-ANGLE-1	Verkada Angle Mount
ACC-MNT-ARM-1	Verkada Arm Mount
ACC-MNT-CJBOX-1	Verkada Circle Junction Box Mount
ACC-MNT-CLIP-1	Verkada Tile Clips Mount
ACC-MNT-CORNER-1	Verkada Corner Mount
ACC-MNT-LBRAC-1	Verkada L-Bracket Mount
ACC-MNT-PEND-1	Verkada Pendant Cap Mount
ACC-MNT-POLE-1	Verkada Pole Mount
ACC-MNT-REC-2	Verkada Recessed Ceiling Mount
INJ-POE-PLUS	Verkada PoE+ (802.3at Type 2) Injector, GigE