

KCD41-E

Transportation Dome Camera



Overview

The KCD41-E Transportation Dome Camera provides reliable 5MP coverage in rugged transportation environments, such as buses, trains, and ferries. It features a 1 / 2.8" progressive CMOS image sensor and 66 feet / 20 meters of IR range, providing consistent image quality in a variety of lighting conditions. A powerful CV75S88 Ambarella processor supports advanced analytics like AI-powered search, person of interest (POI) alerts, and fighting detection.

Designed specifically for transportation deployments, the KCD41-E combines a low-profile form factor with a 15°-90° sensor tilt angle to provide broad coverage. Built for both indoor and outdoor use, the KCD41-E can withstand high vibration¹, a wide temperature range, and frequent pressure washing. It also includes a microphone for optional audio capture in noisy environments.

The KCD41-E's pill-shaped design supports easy mounting on the curved surface of vehicles, and features captive screws that remain attached to the mounting plate, a latch-based cable gland for easy PoE threading, and an LED light status indicator. It also includes a mounting template to ensure consistent placement across the fleet.

The KCD41-E can be paired with a KGX61 Ruggedized Transportation Gateway, which provides power and connectivity.

Key features

Excellent image quality

- 1 / 2.8" progressive CMOS image sensor
- 5MP resolution
- 66 feet / 20 meters of IR range for well-defined nighttime viewing

Advanced analytics

- Onboard CV75S88 Ambarella processor enables people and vehicle analytics
- Supports AI-powered search and AI-powered alerts, such as person of interest and fighting detection

Purpose-built for transportation environments

- Designed to withstand high vibration¹ and pressure washing, with an IK10 and IP6K9K rating
- Preserves footage up to the point of vehicle collision
- Pairs with a KGX61 Transportation Gateway for power and connectivity

Hybrid cloud architecture

- Onboard storage and processing for reduced bandwidth consumption and coverage at scale
- 360-1440 hours (128-512GB) of onboard storage
- Free 30-day cloud backup and unlimited cloud-based archiving of footage

¹. ISO16750 certification pending.



KCD41-E

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	Fixed	IR-cut filter	Yes
Focal length	3.2mm	IR range	66ft / 20m
Aperture	F1.6	Minimum illumination	0.009 lux @ F1.9 (Color) 0 lux with IR illuminators on
Iris	Fixed	Onboard storage	Capacity: from 128GB to 512GB Card: microSD, SDXC
Field of view (after LDC²)	Horizontal: 96° (78°) Vertical: 71° (63°) Diagonal: 128° (96°)	CPU	Ambarella CV75S88
Sensor movement	Tilt: 75° (15° - 90°) Pan: 150° (+/-75°) Rotation: 180° (+/-90°)		

Standard video settings

Compression	H.265, H.264	Historical video settings	Adaptive quality ¹
Frame rate³	30fps	Live streaming settings	High quality (HQ): up to 3,000 kbps (default) Standard quality (SQ): up to 600 kbps
WDR technology	True WDR, dual exposure		

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 802.3af Type 1 PoE Without IR: IEEE 802.3af Type 1 PoE Extended temperature range: IEEE 802.3af Type 1 PoE	Connectivity	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
Power consumption⁴	With IR: 37V-57V, 0.32A-0.21A, max 11.6W, typical 9.7W Without IR: 37V-57V, 0.23A-0.15A, max 8.3W, typical 7.3W Extended temperature range: 37V-57V, 0.35A-0.33A, max 12.95W, typical 12.1W	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.



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Tech specs

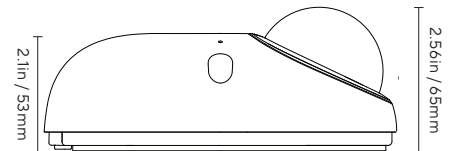
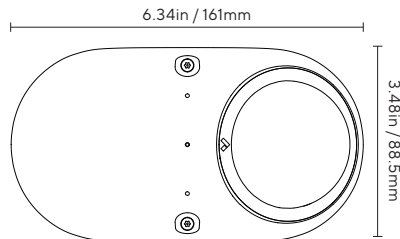
General

Operating temperature (IR on)	-40°F to 122°F / -40°C to 50°C	LED indicator	System power and status indicator, debug indicator
Humidity	0 to 90%	Warranty	10 years
Certifications	For hardware certification information, please visit verkada.com/compliance	Included accessories	T10 security torx screwdriver, mounting template, 2x 2G desiccant bags, 4x self-tapping M4 Phillips screws (25mm), 4x M4 wall screws and wall anchors, 1 extra rubber grommet

Mechanical

Weight	Camera with mount plate: 24.69oz / 700g	Body	Aluminum, plastic dome trim
Dimensions	L: 6.34in / 161mm W: 3.48in / 88.5mm H: 2.56in / 65mm		

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		



Ordering information

KCD41-E Transportation Dome Camera

Model number	Description	US cost (MSRP) ^{USD}	WW cost (MSRP) ^{USD}
KCD41-128E-HW	Transportation Camera, KCD41-E Indoor/Outdoor Dome, 5MP, 128GB of Storage, Maximum 360 Hours of Retention	\$899	\$899
KCD41-256E-HW	Transportation Camera, KCD41-E Indoor/Outdoor Dome, 5MP, 256GB of Storage, Maximum 720 Hours of Retention	\$1,249	\$1,249
KCD41-512E-HW	Transportation Camera, KCD41-E Indoor/Outdoor Dome, 5MP, 512GB of Storage, Maximum 1440 Hours of Retention	\$1,949	\$1,949



Ordering information

Transportation Camera license (new/capacity increase)

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

Transportation Camera license (renewal)

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