

KCF61-E

Transportation Fisheye Camera



Overview

The KCF61-E Transportation Fisheye Camera provides expansive 180° coverage in rugged transportation environments, such as buses, trains, and ferries. It features a large 1 / 1.6" progressive CMOS image sensor and 12.5MP resolution for great image quality in a variety of lighting conditions. The KCF61-E offers wide-angle, 180-degree coverage, yet is built to minimize classic fisheye distortion. A powerful CV72S66 Ambarella processor supports advanced analytics like AI-powered search, person of interest (POI) alerts, and fighting detection.

Built for both indoor and outdoor use, the KCF61-E can withstand high vibration¹, a wide temperature range, and frequent pressure washing. It also includes a built-in microphone for optional audio capture in noisy environments.

The KCF61-E is designed for easy mounting on a vehicle 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 KCF61-E can be paired with a KGX61 Transportation Gateway, which provides power and connectivity.

Key features

Excellent image quality

- 1 / 1.6" progressive CMOS image sensor
- 12.5MP resolution
- 66 feet / 20 meters of IR range for well-defined nighttime viewing

Advanced analytics

- Onboard CV72S66 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

- Robust design for high vibration and impact, with an IK10 and IP66/67 rating
- Preserves footage up to the point of vehicle collision
- Pairs with a KGX61 Ruggedized Transportation Gateway for power and connectivity

Hybrid cloud architecture

- Onboard storage and processing for reduced bandwidth consumption and coverage at scale
- 360-1440 hours (256GB-1TB) of onboard storage
- Free 30-day cloud backup and unlimited cloud-based archiving of footage



KCF61-E

Tech specs

Camera features

Image sensor	1 / 1.6" progressive CMOS	Shutter speed	1 / 120 sec. to 1 / 32000 sec.
Sensor resolution¹	12.5MP (3536 x 3536); resolution (3520 x 3520)	Day/night	IR-cut filter for day and night function
Lens type	Fixed	IR-cut filter	Yes
Focal length	1.7mm	IR range	66ft / 20m
Aperture	F2.0	Minimum illumination	0.009 lux @ F1.9 (color) 0 lux with IR illuminators on
Iris	Fixed	Onboard storage	Capacity: from 256GB to 1TB Card: microSD, SDXC
Field of view	Horizontal: 180° Vertical: 180° Diagonal: 180°	CPU	Ambarella CV72S66

Standard video settings

Compression	H.265, H.264	Historical video settings	Adaptive quality ¹
Frame rate²	24fps	WDR technology	True WDR, dual exposure; up to 120dB dynamic range
Live streaming settings	High quality (HQ): up to 4,500 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 input³	With IR: IEEE 802.3at Type 2 PoE+ Extended temperature range: IEEE 802.3at Type 2 PoE+	Connectivity	RJ-45 cable connector for network/ PoE connection; 10 / 100 / 1000 Mbps
Power consumption³	With IR: 43-57V, 0.46-0.34A, 19.5W Without IR: 43-57V, 0.22-0.17A, 9.5W Extended temperature range: 43-57V, 0.58-0.44A, 24.8W	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. Frame rate can be adjusted by support.

3. Extended temperature range includes operating temperatures below 14°F / -10°C and assumes IR will be enabled.



KCF61-E

Tech specs

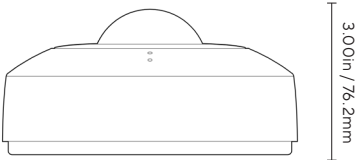
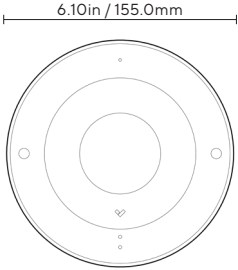
General

Operating temperature	-40°F to 122°F / -40°C to 50°C	LED indicators	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	Screw packs, mount plate with leveler, cable sealing rubber for 6.5-7.5mm, conduit adapter, T10 security driver

Mechanical

Weight	Camera: 48.25oz / 1368g Mount plate: 6.91oz / 196g	Body	Aluminum, plastic dome trim
Dimensions	Ø: 6.10in / 155.0mm, H: 3.00in / 76.2mm with mount plate Ø: 6.10in / 155.0mm, H: 2.72in / 69.2mm without mount plate		

Dimensions



Software capabilities

Alerts	Camera status, motion detection, people detection, vehicle detection, person of interest detection, crowd 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, motion search, trajectory analysis ⁴ , selective face blurring, AI-powered search	Sharing and privacy	Live links, privacy regions, audit log
Vehicle analytics	Vehicle search, attribute search, motion search, trajectory analysis ⁴ , AI-powered search		

4. Trajectory analysis is supported in four-way split, panoramic, and ePTZ circle mode.



Ordering information

KCF61-E Transportation Fisheye Camera

Model number	Description	US cost (MSRP) ^{USD}	WW cost (MSRP) ^{USD}
KCF61-256E-HW	Transportation Camera, KCF61-E Indoor/Outdoor Fisheye, 12MP, 256GB of Storage, Maximum 360 Hours of Retention	\$1,399	\$1,399
KCF61-512E-HW	Transportation Camera, KCF61-E Indoor/Outdoor Fisheye, 12MP, 512GB of Storage, Maximum 720 Hours of Retention	\$2,099	\$2,099
KCF61-1TB-E-HW	Transportation Camera, KCF61-E Indoor/Outdoor Fisheye, 12MP, 1TB of Storage, Maximum 1440 Hours of Retention	\$3,499	\$3,499



Ordering information

Transportation Camera software 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 software 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