CB52-TE Telephoto Bullet Camera
Prominent 5MP Coverage at Distance in Outdoor Environments

Overview

The CB52-TE telephoto bullet camera features a 1 / 2.8" progressive CMOS image sensor, an advanced optical lens with an adjustable focal length of 8mm - 20mm, and powerful long-range (50 meters / 164 feet) IR LEDs for 5MP coverage in various lighting conditions as well as in inclement weather. The CB52-TE features an onboard CV25S Ambarella processor for advanced, privacy-sensitive analytics like AI-powered search, Occupancy Trends, line crossing, loitering, and Person of Interest (POI) alerts. The CB52-TE also supports License Plate Recognition (LPR) – capturing license plates from vehicles traveling at speeds of up to 80 mph / 128 kph across as many as three lanes of traffic. The CB52-TE's telephoto zoom allows for clear images even when the camera is installed far from the area it's monitoring, like on a lamppost next to a sports field or on the side of a building overlooking a corporate office park. The CB52-TE also excels at reading license plates at distance, and its LPR capabilities can be used to access control gated entrances to facilities.

The CB52-TE is constructed with a robust aluminum unibody and designed to withstand extreme conditions with an IP67 weather rating and IK10 impact rating. The camera's design includes a built-in pigtail connector that expedites PoE cabling without requiring disassembly. Installation and setup are easy to track using the LED status indicator.

Key features

Excellent image quality

- 1 / 2.8" progressive CMOS image sensor
- 5MP resolution
- Varifocal lens with an adjustable focal length of 8mm - 20mm
- 50 meters / 164 feet of IR range for optimal nighttime viewing

Advanced analytics

- Onboard CV25S Ambarella processor enables people and vehicle analytics
- License Plate Recognition capabilities capture license plates at speeds up to 80 mph / 128 kph
- 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) of onboard storage
- Redundant cloud backup and unlimited cloud-based archiving of footage

Easy installation

- Built-in pigtail connector for simplified PoE cabling
- Mounting plate and screw pack included
- LED light status indicator

Durability and weather protection

- Factory-sealed robust aluminum unibody
- IP67 weather rating
- IK10 impact rating
- Operability between -40°C to 50°C / -40°F to 122°F

CB52-TE
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	8mm–20mm	**IR Range**	50m / 164ft
Aperture	F1.5–F2.8	**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: 38° - 16° (37° - 16°) Vertical: 28° - 12° (27° - 12°) Diagonal: 48°- 19° (44° - 19°)	**CPU**	Ambarella CV25S88
Camera Movement	Tilt: 0° to 90° Pan: 360° Rotation: 360°		

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	Not supported

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 Mbps
Power Consumption[4]	With IR: 37-57V, 0.38-0.25A, 14.0W Without IR: 37-57V, 0.09-0.06A, 3.5W Extended temperature range: 37-57V, 0.61-0.37A, 22.6W	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 2 Audio support: No

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.
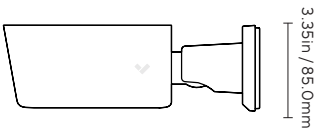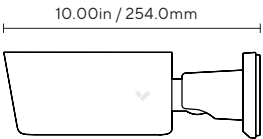
CB52-TE
Tech Specs

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, BIS, CB, UL/cUL/IEC 62368-1, INCM, IP67 weather rating, IK10 impact rating, FY2019 NDAA compliant	**Included Accessories**	4x M4x8 screws, 4x TP4x30 mount screws, mount plate, junction box adapter, junction box cover, T25 hand tool

Mechanical

Weight	Camera: 1478g / 52.13oz Mount plate: 33g / 1.16oz	**Body**	Aluminum
Dimensions	Ø: 85.0mm / 3.35in L: 254.0mm / 10.00in		

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	**License Plate Recognition**	License Plate of Interest alerts, license plate indexing