CH52-E Four-Camera Multisensor

Expansive 5MP Visibility From a Single Install Point

Overview

The CH52-E four-camera multisensor features four independent sensors, providing expansive coverage from a single install point. Each sensor includes a 1 / 2.8" progressive CMOS image sensor, varifocal lens with 2.08x optical zoom, and 30 meters / 98 feet of IR range to provide clear and consistent image quality in any lighting condition. The CH52-E includes four onboard CV25S Ambarella processors to support advanced analytics like AI-powered search, occupancy trends, line crossing, loitering, and person of interest (POI) alerts. The CH52-E excels at covering hallway intersections and exterior corners of buildings, providing comprehensive visibility and eliminating blind spots while only requiring a single PoE++ cable.

With sealed interior components and IP66 weather and IK10 impact ratings, the CH52-E withstands extreme temperatures and excessive precipitation, allowing it to be deployed in a variety of interior or exterior environments. Installation and setup are easy to track using the LED status indicator, while the need for a single cable run minimizes port use.

Key features

Excellent image quality

- Four 1 / 2.8" progressive CMOS image sensors
- 20MP (4 x 5MP) of collective resolution
- Four varifocal lenses with 2.08x optical zoom each
- 30 meters / 98 feet of IR range for nighttime viewing

Expansive coverage

- Individually adjustable and repositionable sensor heads
- Total field of view up to 328°

Advanced analytics

- Four onboard CV25S Ambarella processors enable people and vehicle analytics
- AI-powered search and AI-powered alerts
- Occupancy trends for operational insights

Durability and weather protection

- Sealed interior components
- IP66 weather rating
- IK10 impact rating
- Operability between -40°C to 50°C / -40°F to 122°F

Hybrid cloud architecture

- Onboard storage and processing for reduced bandwidth consumption and coverage at scale
- 30 - 365 days (1TB - 8TB) of onboard storage
- Redundant cloud backup and unlimited cloud-based archiving of footage

Easy installation

- Single PoE++ cable required
- Mounting template and screws included
- LED light status indicator

CH52-E
Tech Specs

Camera features

Image Sensor	4 x 1 / 2.8" Progressive CMOS	**Shutter Speed**	1 / 5 sec. to 1 / 32,000 sec.
Sensor Resolution[1]	4 x 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	3.7 - 7.7mm	**IR Range**	30m / 98ft; non-adjustable
Aperture	F1.9 - F2.9	**Minimum Illumination**	0.009 lux @ F1.9 (color) 0 lux with IR Illuminators on
Iris	N/A	**Onboard Storage**	Capacity: From 1TB to 8TB Card: MicroSD, SDXC
Field of View (after LDC[2])	Horizontal: 89° - 37° (82° - 35°) Vertical: 65° - 29° (60° - 26°) Diagonal: 99° - 46° (92° - 43°)	**CPU**	4 x Ambarella CV25S88
Sensor Movement	Tilt: +0°-105° for each lens from horizon Pan: +/- 90° for each lens Rotation: +/- 90° for each lens		

Standard video settings

Compression	H.265, H.264	**Historical Video Settings**	Adaptive quality[1]
Frame Rate[3]	24fps / sensor	**WDR Technology**	120dB dynamic range, true WDR, dual exposure
Live Streaming Settings (Per Head)	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 802.3bt Type 3 PoE++ Without IR: IEEE 802.3at Type 2 PoE+ Extended temperature range: IEEE 802.3bt Type 3 PoE++	**Connectivity**	RJ-45 cable connector for network/PoE connection; 10 / 100 Mbps
Power Consumption[4]	With IR: 43-57V, 0.65-0.49A, 27.7W Without IR: 43-57V, 0.46-0.34A, 19.5W Extended temperature range: 43-57V, 0.91-0.68A, 38.7W	**RTSP**	RTSP 1.0 RFC 2326 Max concurrent streams: 8 (2 per camera head) 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 -10°C / 14°F and assumes IR will be enabled.
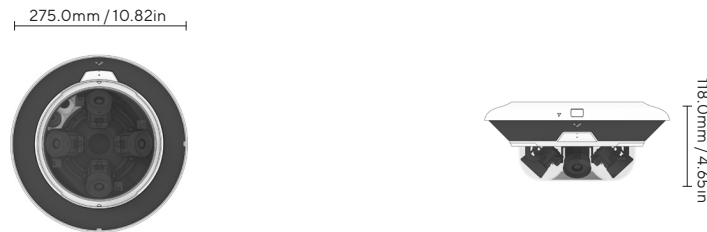
CH52-E
Tech Specs

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, NOM, CB, NTRA, ICASA, UL/cUL/IEC 62368-1, IK10 impact rating, IP66 weather rating, FY2019 NDAA compliant	**Included Accessories**	IR cover, mounting template, 3 mounting screws, 3 wall anchors, 2 desiccants, T10 security screwdriver, offset wrench

Mechanical

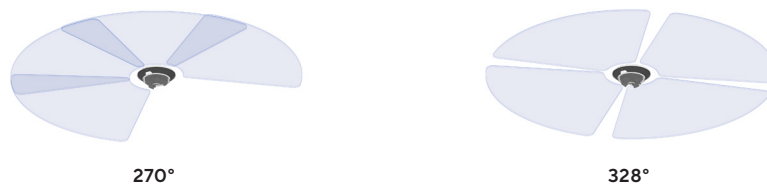|			
Weight	Camera: 2900g / 102.29oz Mount plate: 536g / 18.91oz	**Body**	Aluminum, plastic dome trim
Dimensions	Ø: 275.0mm / 10.82in, H: 118.0mm / 4.65in with mount plate Ø: 267.0mm / 10.51in, H: 114.0mm / 4.49in without mount plate		

Dimensions

275.0mm / 10.82in

118.0mm / 4.65in

Software capabilities

Alerts[5]	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[5]**	Cloud backup, configurable retention days, selectable storage location, low bandwidth mode, timelapse, RTSP
People Analytics[5]	People search, attribute search, face search, occupancy trends, motion search, trajectory analysis, selective face blurring, AI-powered search	**Sharing and Privacy[5]**	Live links, live face blur, privacy regions, audit log
Vehicle Analytics[5]	Vehicle search, attribute search, motion search, trajectory analysis, occupancy trends, AI-powered search		

Coverage examples

270°

328°

5. All the listed features can be enabled independently for each camera head.

Ordering Information

CH52-E pricing

Model Number	MP[1]	WDR	Lens	IR Range	Onboard Storage	Maximum SQ Onboard Retention[1]	People/ Vehicle Analytics	Cost (MSRP) USD
CH52-1TBE-HW	4 x 5MP	✓	Zoom	30m / 98ft	1TB	30 Days	✓	$3,599
CH52-2TBE-HW	4 x 5MP	✓	Zoom	30m / 98ft	2TB	60 Days	✓	$4,899
CH52-4TBE-HW	4 x 5MP	✓	Zoom	30m / 98ft	4TB	120 Days	✓	$7,499
CH52-8TBE-HW	4 x 5MP	✓	Zoom	30m / 98ft	8TB	365 Days	✓	$12,699

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 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 Cloud License pricing (New/Capacity Increase) [2]

Model Number	Description	Cost (MSRP) USD
LIC-CAM-MLT4-1Y-CAP	1-Year Four-Camera Multisensor License, Capacity Increase	$649
LIC-CAM-MLT4-3Y-CAP	3-Year Four-Camera Multisensor License, Capacity Increase	$1,799
LIC-CAM-MLT4-5Y-CAP	5-Year Four-Camera Multisensor License, Capacity Increase	$2,999
LIC-CAM-MLT4-10Y-CAP	10-Year Four-Camera Multisensor License, Capacity Increase	$5,999

Video Security Cloud License pricing (Renewal) [2]

Model Number	Description	Cost (MSRP) USD
LIC-CAM-MLT4-1Y-RNW	1-Year Four-Camera Multisensor License, Renewal	$649
LIC-CAM-MLT4-3Y-RNW	3-Year Four-Camera Multisensor License, Renewal	$1,799
LIC-CAM-MLT4-5Y-RNW	5-Year Four-Camera Multisensor License, Renewal	$2,999
LIC-CAM-MLT4-10Y-RNW	10-Year Four-Camera Multisensor License, Renewal	$5,999

2. Four-camera multisensors require a separate license from other Verkada Cameras.

Ordering Information

Accessories pricing

Model Number	Description	Cost (MSRP) USD
ACC-MNT-ARM-1	Arm Mount	$99
ACC-MNT-CORNER-1	Corner Mount	$199
ACC-MNT-PEND-1	Pendant Cap Mount	$69
ACC-MNT-POLE-1	Pole Mount	$209
ACC-MNT-XLARM-1	Large Arm Mount	$159
ACC-POE-90W-AU	90W PoE++ (802.3bt Type 4) Injector, GigE, Indoor, Australia Type I Plug	$169
ACC-POE-90W-EU	90W PoE++ (802.3bt Type 4) Injector, GigE, Indoor, Europe Type F Plug	$169
ACC-POE-90W-NA	90W PoE++ (802.3bt Type 4) Injector, GigE, Indoor, North America Type B Plug	$169
ACC-POE-90W-UK	90W PoE++ (802.3bt Type 4) Injector, GigE, Indoor, United Kingdom Type G Plug	$169

Ordering Information

Viewing Station pricing

Model Number	Description	Cost (MSRP) USD
VX52-HW	VX52 Viewing Station	$499

Viewing Station License pricing (New/Capacity Increase)

Model Number	Description	Cost (MSRP) USD
LIC-VX-1Y-CAP	1-Year Viewing Station License, Capacity Increase	$499
LIC-VX-3Y-CAP	3-Year Viewing Station License, Capacity Increase	$1,299
LIC-VX-5Y-CAP	5-Year Viewing Station License, Capacity Increase	$1,999
LIC-VX-10Y-CAP	10-Year Viewing Station License, Capacity Increase	$3,999

Viewing Station License pricing (Renewal)

Model Number	Description	Cost (MSRP) USD
LIC-VX-1Y-RNW	1-Year Viewing Station License, Renewal	$499
LIC-VX-3Y-RNW	3-Year Viewing Station License, Renewal	$1,299
LIC-VX-5Y-RNW	5-Year Viewing Station License, Renewal	$1,999
LIC-VX-10Y-RNW	10-Year Viewing Station License, Renewal	$3,999