

## CD53-F Government-Grade Indoor Dome Camera

### Reliable 5MP Coverage for Detailed Visibility in Indoor Government Spaces



#### Overview

The CD53-F FIPS-validated dome camera provides flexible 5MP coverage in a range of indoor environments. With a 1 / 2.8" progressive CMOS image sensor, 2.86x optical zoom, and 30 meters / 98 feet of IR range, the CD53-F offers consistent image quality in most lighting conditions at a variety of distances. The CD53-F also includes FIPS 140-validated encryption and is both TAA and FY2019 NDAA compliant – essential compliance criteria for government-grade deployments. The CD53-F is compatible with the standard Verkada Command platform, as well as Command for GovCloud, Verkada's FedRAMP® Moderate Authorized environment.

The CD53-F includes an onboard CV75S Ambarella processor to support advanced analytics like AI-powered search, line crossing, loitering, and person of interest (POI) alerts. The CD53-F is optimal for covering large and busy spaces such as lobbies, high-ceiling atriums, and manufacturing floors, where detailed face and vehicle capture is required at longer distances.

Installation of the CD53-F 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-F'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
- 30 meters / 98 feet of IR range for extensive nighttime visibility

##### Government-grade security

- Meets the FIPS 140 standard, as validated by NIST
- FedRAMP Ready status at the Moderate impact level as designated by the Federal Risk and Authorization Management Program
- TAA and FY2019 NDAA compliant

##### Advanced analytics

- Onboard CV75S Ambarella processor enables people and vehicle analytics
- Person of interest (POI) alerts for proactive monitoring

##### 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



## CD53-F

## Tech specs

## Camera features

|                                              |                                                                                                            |                             |                                                           |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------|
| <b>Image Sensor</b>                          | 1/2.8" Progressive CMOS                                                                                    | <b>Shutter Speed</b>        | 1/30 sec. to 1/10,000 sec.                                |
| <b>Sensor Resolution<sup>1</sup></b>         | 5MP (2688 x 1944)                                                                                          | <b>Day/Night</b>            | IR-cut filter for day and night function                  |
| <b>Lens Type</b>                             | Varifocal; motorized zoom                                                                                  | <b>IR Cut Filter</b>        | Yes                                                       |
| <b>Focal Length</b>                          | 2.8-8mm                                                                                                    | <b>IR Range</b>             | 30m / 98ft                                                |
| <b>Aperture</b>                              | F1.3 - F2.4                                                                                                | <b>Minimum Illumination</b> | 0.009 lux @ F1.9 (Color)<br>0 lux with IR Illuminators on |
| <b>Iris</b>                                  | P-Iris                                                                                                     | <b>Onboard Storage</b>      | Capacity: From 256GB to 2TB<br>Card: MicroSD, SDXC        |
| <b>Field of View (after LDC<sup>2</sup>)</b> | Horizontal: 109° - 39° (91° - 36°)<br>Vertical: 80° - 29° (71° - 28°)<br>Diagonal: 140° - 48° (107° - 44°) | <b>CPU</b>                  | Ambarella CV75S88                                         |
| <b>Sensor Movement</b>                       | Tilt: 60°<br>Pan: 360°<br>Rotation: 350°                                                                   |                             |                                                           |

## Standard video settings

|                               |              |                                  |                                                                                        |
|-------------------------------|--------------|----------------------------------|----------------------------------------------------------------------------------------|
| <b>Compression</b>            | H.265, H.264 | <b>Historical Video Settings</b> | Adaptive quality <sup>1</sup>                                                          |
| <b>Frame Rate<sup>3</sup></b> | 24fps        | <b>Live Streaming Settings</b>   | High quality (HQ): Up to 3,000 Kbps (default)<br>Standard quality (SQ): Up to 600 Kbps |

## Standard audio settings

|                       |               |                        |                     |
|-----------------------|---------------|------------------------|---------------------|
| <b>Audio</b>          | Supported     | <b>Interface</b>       | Built-in microphone |
| <b>Audio Capacity</b> | One-way audio | <b>Effective Range</b> | 5m / 16ft           |

## Power and network

|                                      |                                                                                                                   |                     |                                                                         |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------|
| <b>Power Input<sup>4</sup></b>       | With IR: IEEE 802.3at Type 2 PoE+<br>Without IR: IEEE 802.3af Type 1 PoE<br>Extended temperature range: N/A       | <b>Connectivity</b> | RJ-45 cable connector for network/PoE connection; 10 / 100 / 1000 Mbps  |
| <b>Power Consumption<sup>4</sup></b> | With IR: 37V-57V, 0.39A-0.29A, 16.8W<br>Without IR: 37V-57V, 0.23A-0.15A, 8.5W<br>Extended temperature range: N/A | <b>RTSP</b>         | RTSP 1.0<br>RFC 2326<br>Max concurrent streams: 2<br>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 -10°C / 14°F and assumes IR will be enabled.



# CD53-F

## Tech specs

### General

|                       |                                                                                                                                     |                      |                                                            |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------|
| Operating Temperature | -10°C to 50°C / 14°F to 122°F                                                                                                       | LED Indicator        | System power, status indicator, and debug indicator        |
| Humidity              | 0 to 90%                                                                                                                            | Warranty             | 10 Years                                                   |
| Certifications        | FCC, ICES, UKCA CE, RCM, VCCI, IK08 impact rating, Compliant to UL 2043, FIPS 140-2 validated, TAA compliant, FY2019 NDAA compliant | Included Accessories | Screw packs, mount plate with leveler, T10 security driver |

### Mechanical

|            |                                                                                                                           |      |                             |
|------------|---------------------------------------------------------------------------------------------------------------------------|------|-----------------------------|
| Weight     | Camera: 963g / 33.97oz<br>Mount plate: 193g / 6.81oz                                                                      | Body | Aluminum, plastic dome trim |
| Dimensions | Ø: 155.0mm / 6.10in, H: 109.0mm / 4.29in with mount plate<br>Ø: 155.0mm / 6.10in, H: 101.9mm / 4.01in 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-F pricing

| Model number  | MP <sup>1</sup> | WDR | Lens | IR range   | Onboard storage | Maximum SQ onboard retention <sup>1</sup> | People/<br>vehicle analytics | US cost (MSRP) <sup>USD</sup> | WW cost (MSRP) <sup>USD</sup> |
|---------------|-----------------|-----|------|------------|-----------------|-------------------------------------------|------------------------------|-------------------------------|-------------------------------|
| CD53-256-HW-F | 5MP             | ✓   | Zoom | 30m / 98ft | 256GB           | 30 Days                                   | ✓                            | \$1,899                       | \$1,799                       |
| CD53-512-HW-F | 5MP             | ✓   | Zoom | 30m / 98ft | 512GB           | 60 Days                                   | ✓                            | \$2,599                       | \$2,499                       |
| CD53-768-HW-F | 5MP             | ✓   | Zoom | 30m / 98ft | 768GB           | 90 Days                                   | ✓                            | \$3,299                       | \$3,199                       |
| CD53-1TB-HW-F | 5MP             | ✓   | Zoom | 30m / 98ft | 1TB             | 120 Days                                  | ✓                            | \$3,999                       | \$3,899                       |
| CD53-2TB-HW-F | 5MP             | ✓   | Zoom | 30m / 98ft | 2TB             | 365 Days                                  | ✓                            | \$6,199                       | \$6,099                       |

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 Cloud License Pricing (new/capacity increase)

| Model number      | Description                                              | US cost (MSRP) <sup>USD</sup> | WW cost(MSRP) <sup>USD</sup> |
|-------------------|----------------------------------------------------------|-------------------------------|------------------------------|
| LIC-CAM-1Y-CAP    | 1-year camera license, capacity increase                 | \$249                         | \$249                        |
| LIC-CAM-3Y-CAP    | 3-year camera license, capacity increase                 | \$659                         | \$659                        |
| LIC-CAM-5Y-CAP    | 5-year camera license, capacity increase                 | \$1,099                       | \$1,099                      |
| LIC-CAM-10Y-CAP   | 10-year camera license, capacity increase                | \$2,199                       | \$2,199                      |
| LIC-CAM-1Y-CAP-G  | 1-Year Camera License for Government, Capacity Increase  | \$299                         | \$299                        |
| LIC-CAM-3Y-CAP-G  | 3-Year Camera License for Government, Capacity Increase  | \$809                         | \$809                        |
| LIC-CAM-5Y-CAP-G  | 5-Year Camera License for Government, Capacity Increase  | \$1,349                       | \$1,349                      |
| LIC-CAM-10Y-CAP-G | 10-Year Camera License for Government, Capacity Increase | \$2,699                       | \$2,699                      |

### Video Security Cloud License Pricing (renewal)

| Model number      | Description                                    | US cost (MSRP) <sup>USD</sup> | WW cost(MSRP) <sup>USD</sup> |
|-------------------|------------------------------------------------|-------------------------------|------------------------------|
| LIC-CAM-1Y-RNW    | 1-year camera license, renewal                 | \$249                         | \$249                        |
| LIC-CAM-3Y-RNW    | 3-year camera license, renewal                 | \$659                         | \$659                        |
| LIC-CAM-5Y-RNW    | 5-year camera license, renewal                 | \$1,099                       | \$1,099                      |
| LIC-CAM-10Y-RNW   | 10-year camera license, renewal                | \$2,199                       | \$2,199                      |
| LIC-CAM-1Y-RNW-G  | 1-Year Camera License for Government, Renewal  | \$299                         | \$299                        |
| LIC-CAM-3Y-RNW-G  | 3-Year Camera License for Government, Renewal  | \$809                         | \$809                        |
| LIC-CAM-5Y-RNW-G  | 5-Year Camera License for Government, Renewal  | \$1,349                       | \$1,349                      |
| LIC-CAM-10Y-RNW-G | 10-Year Camera License for Government, Renewal | \$2,699                       | \$2,699                      |



## Accessories

### Recommended accessories

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