



Administration and Finance

Operations Detail: **UNIVERSITY POLICE DEPARTMENT – 05**

UNIVERSITY POLICE DEPARTMENT
Design Standard for Video Security Camera Systems
March 2024

1.0 PURPOSE

This document provides the campus community with standards regarding Video Security Camera Systems and guidance for any retrofit, upgrade, or new installation thereof.

2.0 BACKGROUND

The installation and use of Video Security Cameras Systems (Camera Systems) on campus requires the approval of the University Police Department. Camera Systems are one of many tools that the campus can deploy as a crime deterrent and safety measure. Camera Systems must comply with the CSU Systemwide Video Security Camera Policy and conform to state and federal law.

3.0 OVERVIEW

This document identifies best practices for the procurement and placement of camera system equipment. It serves as an addendum to procurement policies and regulations. To ensure proper compatibility and integration with current camera systems, entities that intend to implement them should contact Information Technology & Institutional Planning or the University Police Department before making any related equipment or software purchases.

4.0 CITATIONS

[CSU Systemwide Video Security Camera Policy](#)

5.0 PROCEDURES

Equipment Selection Requirements

Below is a list of the minimum requirements that all camera units must possess:

- Camera units must be Axis brand.
- Camera units must have a minimum resolution of 2 Megapixels (MP). The preferred resolution is 5MP.
- Camera units must be Open Network Video Interface Forum (ONVIF) compliant.
- Camera units must be dome cameras.
- Camera units must be equipped with infrared night vision.
- Camera units must be Forensic WDR (Wide Dynamic Range).
- Camera units must have an IP66 water intrusion rating.

Compatibility Requirements

New camera systems must be compatible with current hardware and software systems. Updates to current hardware or software must be compatible with current camera systems. Complete retrofit or upgrades of systems shall become necessary when equipment and software are obsolete or no longer supported by the manufacturer.

Installation Considerations

Location/Placement

1. **Equipment Mounting Height**

Cameras are vulnerable to vandalism or destruction like any other piece of equipment. Cameras must be placed at least 8 feet from the ground to minimize damage or tampering.

2. **Lighting Issues**

Be aware of any lighting issues, such as glare. Both natural and artificial light can cause problems for cameras. Install camera units with a viewing angle that minimizes the impact of direct light as much as possible.

3. **Entrances and Exits to Facilities**

Ideally, cameras should provide coverage for both the interiors and exteriors of facilities.

4. **Known Problem and Sensitive Areas**

Cameras should be installed in known or perceived problem areas (areas where crime may be more likely to occur) like parking lots, bike cages, etc.

5. **Perimeter of Facilities**

Cameras placed at corners often have a wide viewing angle and can be a visible deterrent to would be violators.

6. **Secluded Areas**

Cameras should be installed in secluded areas. Delivery bays or stairwells are often overlooked areas of security and may go several hours or days without constant human presence.

7. **High traffic Areas**

Common spaces such as lobbies, waiting rooms, etc., may require coverage due to crowding or potential interpersonal conflicts.

Special Considerations

1. **Pole Mounted Cameras**

Cameras should generally be mounted on poles between 15 ft. and 20 ft. and be spaced evenly throughout the area to give the most viewing coverage, except for cameras specifically facing an entrance or exit.

2. **Weatherproof Cameras**

Weatherproofing should be a high priority to mitigate harsh environmental conditions. Cameras should be able to function during wide temperature fluctuations.

3. **Camera Overlap**

When possible, camera viewing angles should overlap slightly so there is no break in coverage.

6.0 DEFINITIONS

Camera Units

Camera units are the equipment units that are placed on location that house the actual cameras.

Dome Cameras

Dome cameras are security cameras encased in a transparent protective dome housing.

Open Network Video Interface Forum (ONVIF)

The Open Network Video Interface Forum is an open industry forum for determining how Internet Protocol (IP) cameras and other security products communicate with each other, as well as with video management systems (VMS) and access control systems.

Video Security Camera Systems

Video Security Camera Systems include all or a part of video-based camera systems including cameras, viewing monitors, other related hardware, and software.

7.0 CONTACTS

This operations detail is owned, administered, interpreted, and revised as necessary by the [University Police Department](#) under the Division of Administrative Affairs.

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8.0 REVISION TRACKING

Revision History

Revision Date	Revised by	Summary of Revision	Section(s) Revised
12/08/2023	Natalie Schroeder	Initial Draft	All

Review/Approval History

Approval Date	Approved by	Summary of Approval	Section(s) Approved
3/14/2024	Linh Dinh	Initial Draft	All
4/15/204	Ysabel Trinidad	Initial Draft	All