

CAMPUS-WIDE IP SURVEILLANCE SYSTEM STANDARDS

PART 1 PURPOSE

Any person or unit of the university considering the purchase or installation of an IP Surveillance/Camera System on University premises must first consult with and receive prior approval from UD IT-Infrastructure Security

Any person considering such a purchase must first submit a Request for Service – Facilities web form to initiate the project. Facilities, Real Estate and Auxiliary Services and UD IT-Infrastructure Security will review the physical and personal security needs of the facility and the persons who will occupy that facility, determine appropriate design parameters, and assist with the selection of the system and manage the installation of the system.

This policy applies to new construction, existing facilities, upgrading/changing system designs or specifications and any other modifications to existing or planned security systems.

1.1 GENERAL

A. Scope of Work

1.2 INTRODUCTION

A. The IP Surveillance System (IPSS) must be designed to meet the current and future needs of the University. The IPSS will incorporate the most current and advanced technologies and capabilities. At a minimum, the IPSS must be designed to meet these minimum standards:

1. Must be a Genetec open architecture system
2. Must support an IP network infrastructure.
3. Must be flexible and scalable to allow for future system growth.
4. Should avoid proprietary or sole source procurement systems.
5. Should support H.264, H.265 and High Definition.
6. No cameras should be installed in living spaces.
7. All cameras need to be approved by UD IT-Infrastructure Security.

1.3 SYSTEM INSTALLATION AND CONTRACTORS

A. All contractors working on university I.P. Surveillance Systems (IPSS) shall provide, install, and program a functionally complete video surveillance system per Manufacturer's guidelines, codes, described, and the specifications of the university and must be licensed to conduct business in the State of Delaware.

B. Installation personnel shall be persons who are qualified and experienced in the installation, inspection, and testing of IPSS. Installation of systems will be supervised by University Electronics Shop and UD IT- Infrastructure Security personnel. All installation technicians

must possess a valid State of Delaware Alarm Employee License via the Delaware State Police

- C. All contractors must be an authorized Genetec Channel Partner.

1.4 SYSTEM WIRING

- A. Any system wiring must meet all existing standards of the university.
- B. All system wiring shall be plenum rated.
- C. Video transmission cables shall be plenum rated CAT5e or greater for all camera runs. Field or “homemade” station cables are not acceptable in any case, no exceptions
- D. Any exterior installations will limit the amount of exposed conduit. University Project Planning & Delivery will be consulted where necessary and provide approval on installations, especially in cases where a university building may be subject to local or national historic designation.
- E. Wire gauge and shielding shall follow the manufacturer’s installation guidelines.
- F. All penetrations through fire rated barriers shall be provided with appropriate fire stopping materials in accordance with the National Fire Protection Agency (NFPA) and the local fire code.
- G. All wiring shall be installed in accordance with the National Electric Code (NEC) and the National Fire Protection Agency (NFPA).
- H. All wiring shall be concealed where possible. All exposed wiring shall be installed in a protective metallic housing such as conduit or Wire mold.
- I. Cables penetrating floors and firewalls must be routed through a metallic sleeve and properly fire stopped to meet national and local fire codes. All walls and floors shall maintain their existing fire rating.

1.5 SYSTEMS PROGRAMMING

- A. The Contractor shall complete the initial programming of the IP cameras and will be responsible for working the UD IT-Infrastructure Security to ensure satisfactory system operation.
- B. UD IT-Infrastructure Security will complete all system programming of the Genetec networked video recorder.
- C. The Contractor shall adjust cameras (aim and focus) and verify with UD IT-Infrastructure Security that the field of view is acceptable.

1.6 DOCUMENTATION

- A. Contractor shall include the following documentation in bounded and labeled three ring binders with zipper ends which shall be delivered to UD IT-Infrastructure Security upon final acceptance of the system:
 - 1. Manufacturers Owner’s Manual
 - 2. Manufacturers Users’ Manual and instructions
 - 3. Manufacturers Programming and Installation Manuals
 - 4. Any peripheral devices cut sheets, installation sheets and instructions
 - 5. All user and programming codes

1.7 TRAINING

- A. Upon completion of the installation, the Contractor shall furnish orientation and refresher training, as needed, or determined by UD IT-Infrastructure Security.

1.8 GUARANTEE OF WORK

- A. All components, parts, and assemblies supplied by the Manufacturers and installed by the Contractor shall be warranted against defects in material and workmanship for a period of at least twelve (12) months (parts and labor), commencing upon date of first beneficial use of system by owner. A qualified factory-trained service representative shall provide warranty service.

1.9 SERVICE AND MAINTENANCE

- A. During the warranty period, the Contractor shall be responsible for maintenance and repair of the system including the repair of workmanship defects, free of charge (parts and labor) The installer shall correct any system defect within 3 days of receipt of a call from UD IT-Infrastructure Security. After the initial warranty has expired all service and maintenance of the camera must be paid for by the requesting department. UD IT- Infrastructure Security can open service requests on behalf of the department, but all billing will be sent directly to the requesting department. Departments are required to keep the cameras operational at all times.

1.10 BUILDING SECURITY

- A. Building security shall remain functional during installation. Doors and door locking shall remain operational. University Police must be notified if it is not possible to lock the doors at the end of each workday. Failure to comply will result in removal from the approved vendor list. Existing surveillance systems shall remain in operation during installation. Exceptions must be approved by UD IT-Infrastructure Security. Disruption in surveillance shall be kept to a minimum.

PART 2 VIDEO SURVEILLANCE

2.1 VIDEO SURVEILLANCE DESCRIPTION

- A. Any addition to the IPSS must be able to integrate seamlessly with the existing Genetec system currently in use at the university.
- B. VIDEO SURVEILLANCE FEATURES/CAPABILITIES
1. Cameras shall be high resolution color, day/night mini dome cameras;
 2. PTZ Cameras shall have a minimum 36x optical zoom with 12x digital zoom;
 3. Cameras shall be H.264/H.265 selectable;
 4. The camera shall have privacy masking, the ability to select multiple regions of an arbitrary shape to block the video. This feature will support both HTTP and TFTP protocols, as well as the on- camera web interface.
 5. Cameras shall have a minimum 1080p HD image up to 30fps and full frame (up to 30fps) and a minimum resolution of 1,280 (H) x 960 (v) pixels up to a rate of 24 frames per second (FPS)
 6. Cameras shall be equipped with lenses that have an automatic iris and a variable focal length of 4 to 8 millimeters or greater.
 7. Camera shall incorporate necessary algorithms and circuits to detect motion in low light with clarity;
 8. Camera shall support minimum illumination of 0.1 Lux @ F1.2 in color mode and 0 lux in b/w mode;
 9. For interior cameras, the primary power source shall be Power over Ethernet (PoE) complying with IEEE 802.3af standard;
 10. For any POE (Power over Ethernet) camera using class 1-4 POE can be powered over the UD network. Any camera above class 4 (Such as High-POE) will need a POE injector installed where the camera is being installed. No POE injectors can be installed in the network services closet. Some exceptions to this may be needed when installing wireless equipment or when cable lengths are near the 328ft maximum.
 11. Camera housings shall be vandal resistant;
 12. Camera domes shall be clear unless otherwise directed and be able to maintain operational efficiency during temperature extremes;
 13. Exterior cameras shall be pendant mounted;
 14. The university will determine the camera housing and associated mounting devices from those available from the manufacturer's list of available options, which may be site specific;
 15. Cameras must be compatible, at a minimum, with Genetec Security Center. An approved list of cameras will be maintained by UD IT-Infrastructure Security. Any substitutions must be approved by UD IT-Infrastructure Security, no exceptions;

16. The Basis of Design and existing University PTZ cameras are the Axis P5655-E. These are minimum standards for any PTZ camera to be installed on campus;
17. The Basis of Design and existing Fixed cameras are the Axis P3375-LV. These are minimum standards for any fixed camera to be installed on campus;
18. The camera shall have a minimum 1 year warranty on all parts and labor.

END OF SECTION