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## Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, based on *MasterFormat 2004* and *The Project Resource Manual—CSI Manual of Practice*. *The Manufacturer is responsible for technical accuracy. By removing the references to specific Salient Systems product names or part numbers, the text may also be used also in performance-based specifications.*

The section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project and local building code. *Italicized Words and sentences within brackets [ ] are choices to include or exclude a particular item or statement.* Coordinate this section with other specification sections and the Drawings.

## Section 28 23 23 Video Surveillance Systems Infrastructure

### PART 1 – GENERAL

#### 1.1 SUMMARY

##### A. Section Includes

1. Video surveillance servers.

##### B. Related Sections

1. Section 28 23 13 – Video Surveillance Control and Management Systems.
2. Section 28 23 16 – Video Surveillance Monitoring and Supervisory Interfaces.
3. Section 28 23 19 – Digital Video Recorders and Analog Recording Devices.
4. Section 28 23 29 – Video Surveillance Remote Devices and Sensors

## 1.2 REFERENCES

- A. Underwriters Laboratories, Inc. (UL) ([www.ul.com](http://www.ul.com))
  - 1. UL 50 Enclosures for Electrical Equipment.
  - 2. UL 60950-1 Information Technology Equipment - Safety.

## 1.3 SUBMITTALS

- A. Submit under provisions of Section [01 33 00].
- B. Product Data:
  - 1. Manufacturer's data, user and installation manuals for all equipment and software programs including computer equipment and other equipment required for a complete VMS.
- C. Shop Drawings
  - 1. System device locations on architectural floor plans.
  - 2. Full Schematic of system including wiring information for all devices.
- D. Closeout Submittals
  - 1. User Manuals
  - 2. Parts list.
  - 3. System device locations on architectural floor plans.
  - 4. Wiring and connection diagrams.
  - 5. Maintenance requirements.

## 1.4 QUALITY ASSURANCE

- A. Manufacturer shall have a minimum of 10 years experience in the manufacture and design of VMS products.
- B. Installer:
  - 1. Minimum of 5 years experience installing VMS products.
  - 2. All installation, configuration, setup, program and related work shall be performed by technicians thoroughly trained by the manufacturer in the installation and service of the equipment provided.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Comply with requirements of Section [01 60 00].
- B. Deliver materials in manufacture's original, unopened, undamaged containers with original identification labels.
- C. Protect stored materials from environmental and temperature conditions following the manufacturer's instructions.
- D. Handle and operate products and systems according to manufacturer's instructions.

1.6 WARRANTY

- A. Provide manufacturer's warranty covering three (3) years for replacement and repair of defective equipment.

1.7 MAINTENANCE

- A. Make ordering of new equipment for expansions, replacements and spare parts available.
- B. Provide factory direct technical support to the installing firm.

**PART 2 – PRODUCTS**

2.1 VIDEO SERVER

- A. Manufacturer:  
The Video Server shall be the PowerMicro as supplied by:  
Salient Systems Corporation  
4616 W. Howard Lane, Building 1, Suite 100  
Austin, TX 78728  
512-617-4800  
512-617-4801 FAX  
[www.salientsys.com](http://www.salientsys.com)
- B. Substitutions:  
Under the provisions of Division 1:
  - 1. All proposed substitutions must be approved by the Consultant or Architect/Engineer professional.

2. Proposed substitutions must provide a line-by-line compliance document.
- C. General Server Features:
1. The video server shall be integrated into a workstation-class computing platform ('PC').
  2. The server Operating System shall be Microsoft Windows 7 64 bit Professional.
  3. Server shall have front accessible USB ports.
- D. Server System Components:
1. The server shall meet or exceed the following system component specifications:
    - a. Server shall utilize a Intel H110 Chipset
    - b. Server shall utilize Intel Core i3-4160  $\geq$  3.60GHz
    - c. Server shall have at least 4GB of system memory
    - d. Server Storage Controller shall be SATA (serial ATA) ports.
    - e. Server hard drives shall be Surveillance Class hard drives
    - f. Server shall provide 1TB of internal storage for video event data
    - g. Server shall have one Gigabit Ethernet Network controller port
    - h. Server shall have Intel Integrated Graphics adaptor.
    - i. Server shall have 4 USB 2.0 and 2 High Speed USB 3.0 serial ports, for the attachment of external storage, digital I/O and archive devices.
  2. The server shall support capture of video from cameras:
    - a. Server shall support IP cameras from leading camera manufacturers, with these video feeds connected through the server network controller without the need for encoders or other devices:
      1. ACTi
      2. American Dynamics
      3. Appro
      4. Arecont Vision
      5. Axis
      6. Basler
      7. Bosch
      8. Canon
      9. IQinVision
      10. Lumenera
      11. Panasonic
      12. Pelco
      13. Samsung
      14. SmarterCam
      15. Sony
      16. Toshiba

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- c. Server shall support control of PTZ camera (IP) from leading camera manufacturers:

1. ACTi
2. American Dynamics ASCII
3. Axis
4. Bosch
5. Canon VCC-4
6. Kalatel
7. Panasonic: IP
8. Panasonic IP
9. 10. Pelco IP
10. Philips BiPhase
11. RVision
12. SAE
13. Samsung
14. Sensormatic
15. Sony EVI –D30/D31
16. Sony P5 IP
17. Sony Visca IP
18. Toshiba IK-WB IP
19. Toshiba IK-WB21A IP
20. Ultrak
21. VCL
22. Vicon

E. Chassis Features:

1. The chassis shall be a Micro Tower form
2. The dimensions shall be 1.42” x 7.17” x 6.93”
3. Front ports shall be 1x USB 2.0 1x USB 3.0, 1x Mic-input, and 1x headphone
4. Rear ports shall be 3 x USB 2.0 and 1 x USB 3.0

F. Electrical:

1. Input Voltage: AC 90-264V
2. Power Supply: 65W AC

G. Environmental:

1. Temperature Range:
  - a. Operating: 50 to 95 degrees F (10 to 35 degrees C)
  - b. Non-Operating: -40 to 149 degrees F (-40 to 65 C)
2. Relative Humidity Range:
  - a. Operating 20 – 80% (non condensing at ambient)

## **PART 3 – EXECUTION**

### 3.1 EXAMINATION

- A. Examine area to receive devices and notify any adverse conditions affecting installation or subsequent operation.
- B. Do not begin installation until unacceptable conditions are corrected.

### 3.2 PREPARATION

- A. Protect devices from damage during construction.

### 3.3 INSTALLATION

- A. Install devices in accordance with manufacturer's instruction at locations indicated on the floor drawing plans.
- B. Perform installation with qualified service personnel.
- C. Install devices in accordance with the National Electrical Code or applicable local codes.
- C. Ensure selected location is secure and offers protection from accidental damage.

### 3.4 FIELD QUALITY CONTROL

- A. Test snugness of mounting screws of all installed equipment.
- B. Test proper operation of all VMS devices.
- C. Determine and report all problems to the manufacturer's customer service department.

### 3.5 ADJUSTING

- A. Make proper adjustment to video system devices for correct operation in accordance with manufacturer's instructions.

### 3.6 DEMONSTRATION

- A. Demonstrate at final inspection that the VMS is functioning properly.

END OF SECTION