



## **SAMPLE SPECIFICATIONS FOR ARCHITECTS AND SPECIFYING ENGINEERS ACCESS CONTROL SYSTEM PRODUCTS.**

The following document contains sample specifications for Secura Key Access Control System products. They are written using industry standard formatting and language.

These specifications are for use by architects, consultants, and specifying engineers who are preparing bid specifications for access control, building control and security systems.

The electronic version of these specifications may be copied into the appropriate sections of a complete bid specification by using the “cut and paste” method.

The specifications are written to highlight unique and powerful features of Secura Key Access Control Software and Hardware.

Section headings mention specific models only for clarity – these may be deleted after insertion into the complete specification.

Models covered include the SK-ACPE access control panel, SK-MRCP (Nova.16 Control Panel) and the SK-NET-MLD access control software.

Please see the Secura Key website [www.securakey.com](http://www.securakey.com) if you require technical specifications or additional information on these products.

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**SECTION 16727**  
**PHYSICAL ACCESS CONTROL SYSTEM (PACS)**

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

- A. General Description: This specification section covers the furnishing and installation of a complete access control system.
- B. Contractor shall furnish and install all security hardware devices, mounting brackets, power supplies, switches, controls, consoles and other components of the system as shown and specified.
- C. General Conditions: Provide the work in accordance with Section 16700, Security General Requirements.

**1.2 PRECEDENCE**

Obtain, read and comply with General Conditions and applicable sub-sections of the contract specifications. Where a discrepancy may exist between any applicable sub-section and directions as contained herein, this section shall govern.

**1.3 RELATED WORK**

- A. General: Provide the work in accordance with Section 16700, Security General Requirements, "Related Work".

**1.4 SHOP DRAWINGS & EQUIPMENT SUBMITTAL**

In accordance with Section 16700, Security General Requirements

**1.5 WARRANTY**

In accordance with Section 16700, Security General Requirements

**1.6 QUALITY ASSURANCE**

In accordance with Section 16700, Security General Requirements

**1.7 OWNER'S RIGHT TO USE EQUIPMENT**

The Owner reserves the right to use equipment, material and services provided as part of this work prior to Acceptance of the Work, without incurring additional charges.

**1.8 TECHNICAL REQUIREMENTS, PHYSICAL ACCESS CONTROL SYSTEM (PACS)**

**A. General**

- 1. The following information is provided to establish required system performance for the complete operating PACS. Contractor shall provide equipment, wiring and software programming at XXXXXX sites as necessary to provide a complete system as described herein and as shown on the drawings.

- B. Purpose: The Physical Access Control System is designed to monitor and restrict access to specified areas, and to report on the activity and violations of restricted access in those areas.
- C. Environment:
1. The system shall be wholly contained within (XXXXXXXXXX), but shall also provide access to access control information from remote sites. Refer to the drawings and Bid Instructions to determine the scope limitations for this phase of work.
  2. Card Enrollment: Card enrollment and badge generation shall occur in the (example: Human Resources office) located in the XXXXXX.
  3. Remote Monitoring:
    - a. The system shall support remote monitoring and control over the network or via dial-up modem from any computer properly configured with PACS monitoring software.
- D. Attributes
1. General:
    - a. The system shall comprise Physical Access Control System field devices located as shown on the drawings and connected together to provide a complete and operational system.
    - b. The PACS shall be based on a distributed system of fully intelligent, stand alone controllers, operating in a multi-tasking, multi-user environment.
  2. Software Standardization: The software shall be compatible with a conventional IBM-Compatible PC with standard BIOS, running the Microsoft Windows® operating system (95, 98, NT, 2000, XP, Vista or Windows 7).
  3. Data Base: The software shall incorporate an ODBC compliant relational database, which shall support standard SQL language, user-defined report filters, sorting, and data sharing with other systems. Systems that use a proprietary database shall not be acceptable. The database shall be dynamic in size and shall be automatically extended or retracted as information is added or deleted.
  4. Initial System Size: Provide head-end software, hardware, functions and controls to support a minimum system size of One User, with one location consisting of up to 200 card readers, 800 alarm points and 65,535 cardholders.
  5. System Growth: The system shall be modular such that future growth shall not require the abandonment of any existing system components. Provide a system such that software, functions, controls and peripheral hardware can be expanded to one server and 15 Clients, with unlimited locations each having 200 card readers, 800 alarm points and 65535 cardholders.
  6. System Speed: System speed shall be independent of its size and multi-tasking uses. Communication and processing speed shall be such that:
    - a. Any alarm or event will be sensed, processed and acted upon within one (1) second at the destination point inclusive of any other system activity.

- b. Any access request will be sensed, processed and acted upon within one-half (.5) seconds inclusive of any other system activity.
7. Time Zone Programming: System shall provide full graphical time zone display to simplify time zone programming.
8. Anti-Passback: System shall allow programming of Real Antipassback (requiring cardholders to use designated In and Out readers alternately) or Timed Antipassback (restriction is automatically cancelled upon expiration of timer).
9. Integrated CCTV: System shall allow linking of video and event databases, linking of any reader to a camera. System shall allow an operator to review a video clip of any transaction, or to view live video.
10. Reports
  - a. Standard Reports: Provide a minimum of the following standard reports, completely configured, formatted and linked to the system database:
    - Cardholders
    - Transaction History
    - Card Readers
  - b. Transaction Filtering: System shall allow transaction reports to be filtered by:
    - Category (valid, void or system)
    - Users (all or specific)
    - Card Number (all or specific)
    - Access Group (all or specific)
    - Reader (all or specific)
    - "From" date (first event or specify date)
    - "Through" Date (last event or specify date)
    - Time of day (all or specify start, end)
    - Location (all or specific)
  - c. User Search/Sort: System shall allow the operator to search the user database or sort the screen display or printed lists using the following criteria:

- Last Name
  - Card Number
  - Access Group
  - In/Out Status
  - Department
  - Title
  - Telephone Extension
  - Employee Number
  - Parking
  - Vehicle 1
  - Vehicle 2
  - User Defined Field 1
  - User Defined Field 2
11. Integrated Badge Printing: The system shall include template-based badge design and printing capabilities. All badge printing functions shall share a common database with the PACS system Host.
12. Integrated Badge Design and Printing:
- a. Badge design and printing capability shall be a fully integrated part of the PACS system software.
  - b. The system shall support badge production facilities.
  - c. Provide complete template-based badge design software, a multiple (or single) badge dye-sublimation printer with integrated software and a YMCKO Printer Ribbon. Cardholder photos can be taken with any digital camera and be easily imported into the SK-NET Database.
  - d. Badging functions shall share a common database with the PACS system Host. Text fields printed on the badges are directly extracted from the SK-NET database. When configuring the badge layout, the user can choose whether or not to display each data field. The user can select a font, font color, and point size for each field, and he can choose the display order of First name, Last name and MI.
  - e. Cardholder photos shall utilize JPEG image-compression standard.

- f. Provide Template-based Badge Design Software, allowing the user to select from seven different standard templates, which include portrait or landscape layouts and different locations for photos, names and organizational logos which shall support user configuration of badge design including but not limited to importation of logos, pictures, background graphics, card-coloration, and font control.
- g. Badging software shall support storage and viewing of completely assembled badges as they were originally processed.
- h. Includes Bar Code Software capable of generating user-defined bar codes for printing on card media.
- i. The system shall be available with multiple printer options:
  - 1) A 4-color dye sublimation printer with automatic feed and a 100 card feed hopper.
  - 2) A 4-color dye sublimation printer with manual feed.
  - 3) Additional printer models shall be available including single or dual-sided printers, light or heavy duty models, and reverse-transfer printers.

## PART 2 - PRODUCTS

### 2.1 GENERAL

- A. Product Acceptability: The Products section contains lists of acceptable products. If product substitutions are proposed, they must be made based upon a comparison of equivalence to the product specified. Considerations may include but shall not be limited to functional, physical, aesthetic and/or interface aspects. The Architect shall be the sole judge of whether or not a submitted substitution is deemed to be "equivalent" to that specified.

### 2.2 ACCESS CONTROL EQUIPMENT

- A. Access Control Software: Secura Key SK-NET-MLD Client/Server (specify 2-15 users) including integrated badge design and printing software.
- B. Access Control Panels: Secura Key SK-ACPE-LE 2-door control panel, or SK-MRCP-LE 16-door control panel including built-in Network Interface
- C. CCTV DVR and software: Odyssey Technologies' Remote Eyes. Consult factory for additional models/brands of compatible DVRs.
- D. Color Badge Printer: Ultra Magicard Rio Pro
  - 1. Provide Magicard dye-sublimation badge printer, with interfaces, ribbon, and software required for a complete, operating system. Printer shall be capable of:
    - a. Inline topcoat application
    - b. Magnetic Stripe encoding
  - 2. Provide sufficient print media (ribbon, etc.) for (insert quantity) cards.

- E. Access Control Readers: See separate Sample Specification for Radio Key Proximity or e\*Tag Contactless Smart Card readers
- F. Access Control Cards: See separate Sample Specification for Radio Key Proximity or e\*Tag Contactless Smart Cards.

### 2.3 FINAL PROCEDURES

Perform final procedures in accordance with Section 16700, Security General Requirements.

End of Section