VAX Access Control
VAX Components

VAX Access Control Products

1. VAX Access Control Servers connect to ViconNet software to create one truly powerful building security system.

2. Vicon offers a variety of controller devices to secure ALL entrances and exits in one simple system.

3. Manage unlimited sites across multiple time zones using VAX multiscreens.
Vicon VAX

SYSTEM OVERVIEW

• Web-Based, Power Over the Ethernet (POE) Access Control System.

• POE Single Door Controller embedded with request to exit motion detector.

• POE Two Door Controller (Single reader doors)

• Lightning Fast 100MB/Sec Communications

• 802.11B/G Wireless Connectivity

• Fully Distributed Processing (field controllers not dependent on Server operation)

• Minimal wiring/installation with feedback at the door making installing quick and clean
Vicon VAX

HARDWARE OVERVIEW

• Unique over-the-door design, drastically reduces installation and service time.

• On-board LCD/diagnostics reduces manpower during installation and service.

• Scalable interoperability with laptops, tablets and smart phones (Android, Apple, Blackberry)

• Supports static or DHCP Connection Modes.

• 12VDC/500mA output. Supports both electronic strike or maglocks through POE.

• Versatility. At the door, over the door, back in the closet.
## VAX ODM Specification

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>32-Bit Microprocessor-Based</td>
<td></td>
</tr>
<tr>
<td>Power over Ethernet</td>
<td>IEEE 802.3af PoE standard provides up to 15.4 Watts.</td>
</tr>
<tr>
<td>DC 12V power output for motion or other devices</td>
<td></td>
</tr>
<tr>
<td>Output Port (fully configurable)</td>
<td>Lock relay - supply power (12V, 500mA) to the lock, over current protection, SSR Relay2, SSR Relay3 - 60V (TVS circuit limits 24V), 500mA, fully configurable, no mechanical ports</td>
</tr>
<tr>
<td>Input Ports</td>
<td>Fully configurable including supervised or digital input setting, includes door contact, exit button, external request to exit motion etc.</td>
</tr>
<tr>
<td>Tamper Sensor</td>
<td>Photo tamper sensor (configurable)</td>
</tr>
<tr>
<td>Readers Ports</td>
<td>2 ports, hardware data monitoring LEDs, configurable reader port mapping (Example: Reader-Port1 maps to Door1-Outside.)</td>
</tr>
<tr>
<td>Networking</td>
<td>10/100Mbps supporting Static or DHCP modes.</td>
</tr>
<tr>
<td>Displays</td>
<td>2 Line x 16 Ch LCD Display (contrast adjustable) with LED back light (brightness adjustable) 4 user LED's, 2 power LED's, 3 relay output indication LED's, 2 Ethernet status LED's</td>
</tr>
</tbody>
</table>
### VAX ODM Specification (Continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keyboard</td>
<td>Four user push buttons for data entry or output selection.</td>
</tr>
<tr>
<td>Time</td>
<td>Keeps up to 1 month without power connection. No battery needed.</td>
</tr>
<tr>
<td>Sounder</td>
<td>On-board piezo buzzer (90dB at 10cm), Optional loud buzzer (100dB at 100 cm)</td>
</tr>
<tr>
<td>Multi-purpose Expansion Port</td>
<td>Supports WiFi, serial, extra memory, I,Os .. (for future expansions)</td>
</tr>
</tbody>
</table>
**Motion Sensor**

**Specification**

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>PIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection Range</td>
<td>5 m</td>
</tr>
<tr>
<td>Detection Angle</td>
<td>H: 94°, V: 82°</td>
</tr>
<tr>
<td>Detection Zone</td>
<td>64 zones</td>
</tr>
</tbody>
</table>
ELEVATOR CONTROLLER WITH 8 FLOOR EXPANDER

- 8 Floor Expander
- 8 Solid State Outputs
- 8 Inputs
- Keyboard Control For Full Configuration
- LCD aiding in diagnostics and configuration
- Power Over Ethernet Port
- Reader Ports
- Master Controller
Vicon VAX

16 FLOOR ELEVATOR / IO EXPANDER

8 Floor Expander

8 Floor Expander
Vicon VAX

ODM LAYOUT WITH RS485 MODULE FOR APERIO

- Power Over Ethernet Port
- LCD aiding in diagnostics and configuration
- Aperio RS485 Module (Field Replaceable)
- Keyboard Control For Full Configuration
- Optional Motion Sensor
- External Status LED’s

Teamwork  Empowerment  SUCCESS
Vicon VAX

VAX SOFTWARE FEATURES

• SQL Database, reliable and robust data storage
• HTML5 enabled web client. Scalable
• Advanced SSL encryption
• Unlimited Access Groups

• Manage unlimited sites across multiple time zones
  • Unlimited Doors
  • Unlimited Users
  • Unlimited Door Time Zones
Vicon VAX

CAMERA SYSTEM INTEGRATION OVERVIEW

• Real time or historical video right from the web browser
• Integrate with MULTIPLE Vicon camera systems across the internet
• Associate cameras with Doors or Elevators
• PTZ camera Presets allow one camera to monitor multiple Doors
• Historical access reports can pull up historical camera view of the event
• Cameras can be viewed on different screens for multi-monitor setups
• Secured with HTTPS
• Customizable alerts that can spawn a camera feed
VAX Application Server
Alternatively can be installed on a Windows Based P.C.

LAN/WAN

Site A
Unlimited number of controllers connected to network

ODM
Single Door P.O.E. Controller

P.O.E. Network Switch

Vicon Camera Software

Web-based Administration
Access the application server from any HTML5 enabled device via a secure web based connection. Camera video playback only available on desktop browsers.

Complete Flexibility:
VAX can communicate to multiple Vicon Camera Systems through LAN/WAN. Saving on bandwidth, and network strain.

Site B
Unlimited number of controllers connected to network

ODM
Single Door P.O.E. Controller

P.O.E. Network Switch

Vicon Camera Software
VAX server software is installed on Windows 7/8/10 Professional 32-bit or 64-bit; Windows 2003, 2008, or 2012 server. It’s possible to install on virtual machine.

Server Minimum Specifications:
• Intel Core i5 processor or higher
• 4GB RAM
• 5GB Free Hard Drive Space (Additional space required for database).

Note: The computer specifications are the minimum standards for a basic system. When a system includes a large number of clients (10+), controllers (50+), and/or users (2000+), additional server power is strongly recommended.

*Refer to VAX Tech Guide pg. 17.
VAX is a modern HTML5 web-based client/server access control system. The server application is designed to be installed on stand-alone PC and may be accessed using one or more clients via web browser. VAX Server software consists of:

- **VAX Access Control Web Server**: The web server hosts the web application and facilitates client access to managing your access control system. On VAX server, access web service by going to Windows Start menu → All Programs → VAX Web Interface. On web client, type https://VAXServerIP:11001. Username (email address) and password are what you initially set after software installation.


- **Microsoft SQL Server Database**: VAX server software is designed to back onto a local or remote Microsoft SQL Database. You can use the free (included) SQL Express 2012 or your own pre-installed instance of Microsoft SQL (minimum version of 2008 recommended). Non-Microsoft SQL Database is not supported.

*Refer to VAX Tech Guide pg. 17.*