

## VICONNET WEB/MOBILE SERVER



### Overview

The ViconNet® Web/Mobile Server is designed to allow authorized security managers and operators to select and control video displayed from a browser-based interface. It also supports the use of Apple® and Android™ mobile devices, up to 4 streams on phones and 9 on tablets.\* The server acts as a gateway to the ViconNet network video system without any requirement to install and maintain client-based software.

The web viewer application uses a standard browser interface such as Internet Explorer®, Firefox®, Chrome™ and Safari®. The browser interface utilizes Microsoft®'s Silverlight® technology that eliminates any requirements to download a plug-in.

There are two options for the Web/Mobile Server deployment. For up to 10 concurrent web viewers (no mobile users), run it on the system Nucleus (assumes a dedicated Nucleus PC); for a higher number of concurrent users, run on its own dedicated server as a full service. Refer to the Performance Table that follows.

\*The mobile application requires version ViconNet 6.6SP2 with Mobile update on the system used as a Web/Mobile Server.

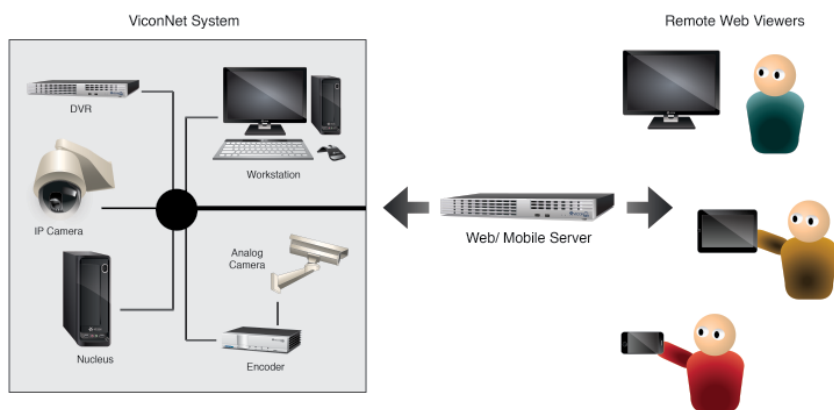
- Supports use of mobile phones and tablets running Apple or Android OS
- Web server provides a gateway to access the entire authorized ViconNet system through a single IP address
- Browser-based thin client interface for live and archived viewing
- Maximum of 16 live or playback video feeds on the web viewer
- Maximum of 4/9 live or playback video feeds on a mobile phone/tablet (screen size related)
- Select cameras from the device list or camera groups
- Supports display of up to 1080P resolution video streams
- Compatible with ViconNet versions 4, 5 and 6 systems when running as a standalone server

### Web/Mobile Server Requirements

The number of web/mobile servers required to support the video streams on the mobile and web viewers depends on a variety of factors. The combination of these factors will determine system requirements (additional web servers may be required on certain size systems, depending on these factors\*\*). Refer to the Performance Table at the end of this sheet.

- Type of video compression
- Resolution of video source
- FPS rate of video source
- Number of concurrent viewers and video streams needed

\*\*When multiple servers are used in a system, the Nucleus should be configured as a load balance server, which will allow it to transparently manage the load between all available servers while maintaining a single IP address for the users.



Typical System Installation

## Minimum System Specifications (for software installation)

<b>Minimum PC Requirements:</b>	Microsoft Windows® 7 operating system; Intel® Core™ i5 processor; 4 GB RAM; 250 GB hard drive; 1 GB LAN card; video card with 128 MB memory. Supported OS: Windows XP Professional (32 or 64-bit); Windows 7 Professional (32 or 64-bit) Windows Server 2003 and 2008
<b>Approved Browsers for Web Viewer:</b>	Internet Explorer, Google Chrome, Firefox® (Mozilla®) and Safari.
<b>ViconNet Minimum Requirements Supported by Web Service:</b>	Compatible with ViconNet versions 4.x, 5.x and 6.x.

## Electrical Specifications (for preconfigured PC)

<b>Input Voltage:</b>	105-240 ±10% VAC, 50/60 Hz.
<b>Current:</b>	0.6 A @ 115 VAC; 0.3 A @ 240 VAC.
<b>Power Consumption:</b>	69 W nominal.
<b>Heat Output:</b>	242 btu/hour.
<b>Power Connector:</b>	Standard 3-conductor female socket.
<b>CPU:</b>	Intel® Core™ i5.
<b>Memory:</b>	4 GB.
<b>OS:</b>	Windows 7 Embedded*, 64 bit.
<b>Network Interface:</b>	100/1000 Base T Ethernet interface on main board.

Note: Vicon requires the use of uninterruptible power supply systems (UPS) to prevent voltage fluctuations that can affect operation and cause damage to the equipment. Failure to comply voids the warranty.

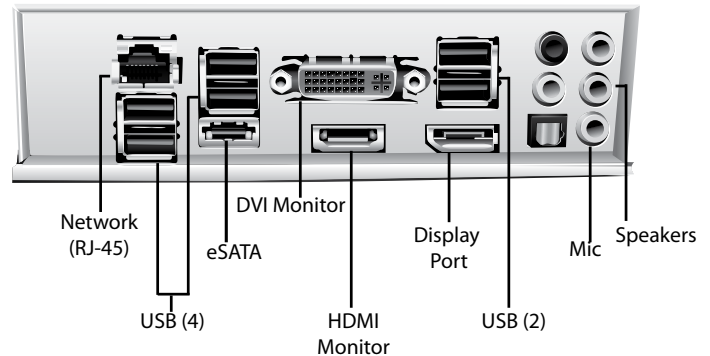
\* If a full Windows O.S. is required, contact your Vicon Sales Representative.

## GUI Features

<b>Live View:</b>	Up to 16/9/4 (viewer/tablet/phone) cameras can be displayed simultaneously.
<b>Playback:</b>	Quick playback, playback from time/date or playback from database storage. Fast forward and rewind at selected speed or pause video.
<b>Display Modes:</b>	Viewer: Single, quad (2x2), six (3x2), nine (3x3), sixteen (4x4) and full screen options. Tablet: Single, quad (2x2), six (3x2; 5x1), and nine (3x3) screen options. Phone: Single and quad (2x2) screen options.
<b>PTZ Controls:</b>	Pan, tilt and zoom; autopan with speed control. Up to 99 presets can be recalled; presets can be programmed on viewer. Viewer only: Focus (near/far), iris (open/close) and autoiris. Lens speed.
<b>Alarms:</b>	Viewer only: Notification of alarms received by the Web Server.
<b>Log Files:</b>	Viewer only: Save log files as required for support.

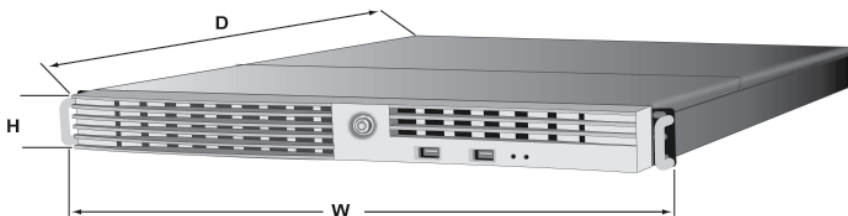
## Mechanical Specifications

<b>Dimensions:</b>	Rack: 1.75" (44.45 mm) H x 19" (483 mm) W x 16" (406 mm) D, including connectors. Desktop: 6.59 in. (167.5 mm) H x 2.13 in. (44 mm) W x 6.59 in. (167.5 mm) D. Rack: Approximately 14 lb (6.4 kg). Desktop: Approximately 7.5 lb (3.4 kg).
<b>Weight:</b>	



Rear Panel Connections

## Dimension Guide



Data Sheet Number: V220-01  
Dated: 8/2013

Vicon Data Sheet Number: 8009-7220-01-01  
Specifications subject to change without notice.

Vicon, ViconNet and their logos are registered trademarks of Vicon Industries Inc. Microsoft, Windows and Internet Explorer are registered trademarks of Microsoft Corporation. Pentium is a registered trademark and Dual Core a trademark of Intel Corporation. Apple and Safari are registered trademarks of Apple Inc. Mozilla and Firefox are registered trademarks of Mozilla Corp. Google Chrome and Android are trademarks of Google.

Copyright © 2013 Vicon Industries Inc. All rights reserved.

Performance Table

The following table shows a variety of combinations of devices as examples. It is provided as an aid in calculating the number of devices that can be supported by your web server and the number of servers needed to meet your requirements. Other combinations of devices are possible for individual needs; if less than the maximum number of streams is used by a device, simply use the number of streams rather than using the maximum number in the table. Use Vicon's Web and Mobile Server Calculator, posted on our website, [www.vicon-security.com](http://www.vicon-security.com), to help determine the number of servers required to support mobile and web viewing for specific system parameters.

Resolution	Number of Concurrent Streams Supported by a Single Web/Mobile Server	Tablets (9 streams each)	Maximum Number Streams	Phones (4 streams each)	Maximum Number Streams	System Demand	Estimated Bandwidth (per stream from server to client)	Additional Web Viewers Supported by Same Server
D1	35	0	0	8	32	32	~2 Mbps	15
		1	9	6	24	33		
		2	18	4	16	34		
		3	27	2	8	35		
720p/1.3 MP	20	0	0	5	20	20	~3 Mbps	12
		1	9	2	8	17		
		2	18	0	0	18		
1080p/2 MP	12	0	0	3	12	12	~3.5 Mbps	10
		1	9	0	0	9		
3 MP	8	0	0	2	8	8	~3.5 Mbps	8
		1	8*	0	0	8		
5 MP	5	0	0	1	4	4	~3.5 Mbps	6
		1	5*	0	0	5		

\*Cannot exceed the maximum number of concurrent screens

The number of servers required to support a system's needs is determined by a number of key factors and their impact on the amount of processing required from the server. The higher the processing requirements are, the more servers will be necessary to provide constant high-quality service. The parameters for consideration are:

- Mobile clients require more processing power than standard web viewer clients (usually H.264), due to the need for transcoding the video to M-JPEG.
- Cameras with resolutions up to 2 MP can be sent directly to the standard web viewer transcoding; resolutions over 2 MP require transcoding even to the web viewer, with an even bigger impact on resources when using mobile devices.
- Cameras that offer a second stream can be configured to use that for live viewing at a lower resolution, requiring less resources.
- Cameras with MPEG-4 video streams must be thought of as mobile devices due to the need for transcoding to M-JPEG.

Models and Descriptions

Model Number	Description
VN-WEB+MOBILE-SYSTEM	Preconfigured tower PC that contains ViconNet Web/Mobile Server software VN-WEB+MOBILE-SW
VN-WEB+MOBILE-SYSTEM-R1	Preconfigured rack-mount PC that contains ViconNet Web/Mobile Server software VN-WEB+MOBILE-SW
VN-WEB+MOBILE-SW	ViconNet Web/Mobile Server software that can be installed on customer PC that meets minimum requirements