

NUCLEUS

Enterprise System Management Server



- Solid state OS hard drive provides enhanced reliability
- Available as software only or preinstalled on a 1 RU rack-mount or tower PC
- Provides web browser thin-client interface to entire ViconNet system
- Centralized management of all components of the system
- ViconNet safeguards allow operation of systems when Nucleus is disconnected
- Recommended for systems with more than 5 DVRs/NVRs or operational Workstations

For most ViconNet® systems it is recommended that there be a dedicated Nucleus to handle all system management features; in large ViconNet systems (more than five DVRs/NVRs/Workstations), it is required that the Nucleus be run on a dedicated unit to maintain optimal system performance.

The ViconNet Nucleus system has ViconNet software preloaded in an attractive, space-saving 1 RU rack-mount chassis, the VN-NUC-SYSTEM-R1; the desktop version is the VN-NUC-SYSTEM. The ViconNet software that powers the Nucleus, VN-NUC-SWV6, provides an open platform that allows integration with IP cameras, including megapixel cameras, encoders and IP edge devices from numerous industry-leading manufacturers.

ViconNet software provides outstanding functionality and an intuitive interface for administrators, security managers and system operators anywhere on the network. Multi-site users, in particular, benefit from the efficiency of enterprise management options.

What is the Nucleus?

ViconNet employs a distributed architecture that is linked together through a server designated as the "Nucleus." The Nucleus takes an active role in the ViconNet system, acting as a central station that connects all devices running the ViconNet application.

The Nucleus maintains a master copy of all critical settings in the system that enables the entire system to work together virtually as a single entity. Each NVR, DVR and workstation maintains a current copy of the Nucleus configuration settings, so that in the event there is a failure, the system will continue to operate without disruption. The information on the Nucleus is always sent to all devices (after any update), so in a case where the Nucleus fails, they can use that data to operate until the Nucleus is restored. In such cases, only "new" actions that require the Nucleus will not work (such as adding a new site).

When setting up a network, this unit is assigned as a Nucleus and the other devices in the network point to it. Each device (either a transmitter or a Workstation) has the option to input the Nucleus IP address. Devices that share the network can connect to the same Nucleus and form a system, which enables them to connect to each other. This includes the ability to synchronize multiple devices with the Nucleus time or update all the time settings to another time zone.

Models and Descriptions

Model Number	Description
VN-NUC-SYSTEM-R1	PC with preloaded ViconNet version 6 Nucleus software; single license; rack-mount.
VN-NUC-SYSTEM	PC with preloaded ViconNet version 6 Nucleus software; single license; desktop.
VN-NUC-SWV6	ViconNet Nucleus software; version 6; for installation on customer-provided PC that meets specified minimum requirements.

Minimum System Specifications (for software installation)

Minimum PC Requirements:	Microsoft Windows®XP, 7 or Server 2008 operating system; Intel® Core™ i5 processor; 4 GB RAM; 250 GB hard drive; 1 GB LAN card; video card with 128 MB memory.
DVD Drive:	Internal DVD drive.
Network Interface:	100/1000 Base T Ethernet interface on main board.

Software Features

- Access and configure all devices connected to the Nucleus
- Time synchronization
- View live and playback video as needed for configuration
- Configure User and Group Management
- Configure Central Failure Notification mechanism
- Configure the Web Server
- Reset the Nucleus
- Add 3rd party I-Onyx cameras

Electrical Specifications (System hardware)

Input Voltage:	115-230 ±10% VAC, 50/60 Hz.
Current:	0.6 A @ 115 VAC; 0.3 A @ 230 VAC.
Power Consumption:	69 W nominal.
Heat Output:	242 btu/hour.
CPU:	Intel® Core™ i5.
Memory:	4 GB.
OS:	Windows 7 Embedded*, 64 bit.
Network Interface:	100/1000 Base T Ethernet interface on main board.
Certifications:	CE and FCC, Class A.

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 with this violates the unit warranty

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

Indicators and Connectors

Panel Indicators:	1 blue LED used for power status indication. 1 re LED used for HDD indication.
Panel Key Lock:	Key lock provided on front panel to secure all controls.
Network Port:	RJ-45 jack.
Video Output Connector:	VGA Mini D-sub or HDMI.
Network Port:	RJ-45 jack, Ethernet 100Base-T.
Keyboard Port:	USB.
Mouse Port:	USB.
Peripheral Ports:	8 USB (2 front, 6 rear).
Power Connector:	Standard 3-conductor female socket.

Mechanical Specifications

Application:	Indoor
Mounting:	Standard 19 in. (483 mm) rack mount and stackable, 1 RU height, or desktop option.
Dimensions:	Rack: 1.75" (44.5 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.
Weight:	Rack: Approximately 14 lb (6.4 kg). Desktop: Approximately 7.5 lb (3.4 kg).
Construction:	Steel case and hardware.
Color:	Black.

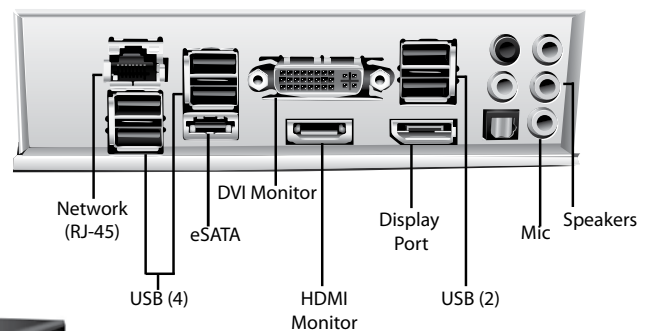
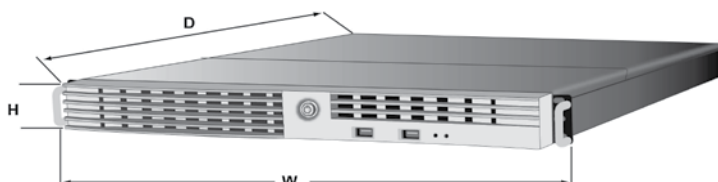
Environmental Specifications

Operating Temperature:	32° to 104°F (0° to 40°C).
Operating Humidity:	Up to 95% relative, non-condensing.
Storage Temperature Range:	-4 to 158° F (-20 to 70° C) maximum.

Warranty

3 years parts and labor.

Dimension Guide



Rear Panel Connections

Data Sheet Number: V239-01

Dated: 06/2012

Vicon Data Sheet Part Number: 8009-7239-01-00

Specifications subject to change without notice.

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