



Five9NS R2100RS Rack Mount Server

Installation Manual

Version July 24, 2014: This version supersedes all previous versions.

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R2100RS

2U Rack Mount

1.0 General Information

1.1 Introduction

This manual contains information for the proper installation of the Five9 Network Systems, LLC. 2U Rack Mount Server, Model No: R2100RS. Also included are physical and electrical characteristics of the unit.

1.2 Purpose of the Equipment

1.2.1 Five9NS's R2100RS is a 2U server designed for storage and RAID applications. It supports a large range of Intel XEON x86 processors from dual-core to quad-core, which are carried as a part of the Intel Embedded IA Extended Life Cycle Support. In the recommended installation, the unit receives power from an AC power source and sits in a rack.

1.2.2 It supports Solaris which is the most scalable and secure operating system. With Solaris, the R2100RS server provides fast performance, near-continual uptime, and the security and reliability required from a mission-critical system.

2.0 Application

2.1 Introduction

The R2100RS is a 100-240 Vac product that serves as a rack mount unit. It contains an Intel motherboard and CPU. Included also in the unit are seven 2TB Hard Drives, an 8-port RAID Card, a 4-port Ethernet Adapter, and a DVD-RW drive.

2.2 Typical Application

Within a rack mount environment, the R2100RS will be installed above or below other servers. Specific rack mount instructions apply to the installation process.

Please see section 3 for more details.

3.0 Installation

3.1 Prior to Installation

The R2100RS is a simple module to install. Before installation, the following items should be considered

3.1.1 Careful consideration of the location of the R2100RS is necessary. Some of the items to consider include:

- Space to allow adequate airflow
- Length of cable runs
- Environmental conditions
- Access for service repair (if applicable)

Note: Please see detailed instructions for rack mounting in section 3.1.3

3.1.2 The R2100RS shall be installed to conform to the standards designated by the customer and manufacturer specifications as to the unit location and type of installation.

3.1.3 The following rack mount instructions should be followed

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

E) Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips)."

F) System Maintenance - Maintenance and servicing of this product is to be performed only by trained service personnel who are knowledgeable on the procedures and hazards associated with this product.

G) Cautions and Warnings – All caution and warning instructions noted on the product and in the manual should be followed (see Section 3.3 below for details).

3.2 Unpacking and Inspection

3.2.1 Carefully open the packaging and remove the R2100RS. Verify that all components have been included in the package per the packing list. Inspect the unit for shipping damage.

3.2.2 If damage has occurred during shipping, a claim should be filed with Five9NS and an RMA shall be obtained from Five9NS.

3.3 Cautions and Warnings

3.3.1 Do not remove any factory-installed screws

3.3.2 Do not install near heat sources

3.3.3 ESD (Electro Static Discharge) guidelines shall be followed when installing

the optional equipment



3.3.4 CAUTION: Risk of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

3.4 Wiring Requirements

3.4.1 The length and routing of external cables should be carefully studied and planned before attempting installation of the equipment. Allow adequate space for installation of cable and connectors. Avoid sharp bends.

3.5 Physical Characteristics

3.5.1 The R2100RS shall be located away from heat sources, magnetic fields and areas with excessive dust.

3.5.2 When using a rack mount, the unit shall be rigidly mounted to its location using the appropriate hardware

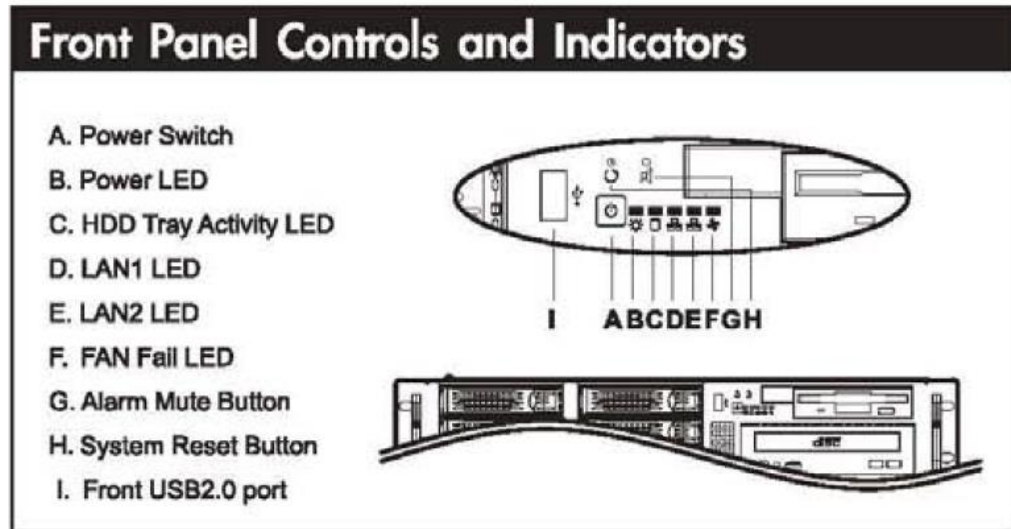
3.6 Electrical Characteristics

3.6.1 Electrical Specifications

Electrical	Input Voltage	100-240 Vac
	Input Current	8-4 Amps max
	Input Frequency	60-50 Hz

3.6.2 Power Switches

The R2100RS has 3 power switches: a System Power Switch and a System Reset Switch in the front as well as a general On/Off switch on the power supply from the back. The following diagram shows the front power switches and the rest of the front panel controls and indicators.



The System reset switch will soft reset the system; the PSU will not cycle the power ON / OFF.

The System power switch will power ON / OFF the system power supply according to Motherboard BIOS setting, (if you press power switch over 4 seconds the system will power off)

The power switch on the back is a general On/Off switch providing the ability to hard turn off the system

3.7 Post-Installation Test

Once the R2100RS is properly installed, turn the system on and verify using a monitor that the motherboard is booting up. To test with Solaris 10, use the following guidelines:

Login as root -> Open a shell window and type in the following commands:

```
cd /usr/sunvts/bin
```

```
./startsunvts
```

You will have to choose between different interfaces to run SUNvts with. Choose the command line option and enter the following commands:

```
./vts_cmd list_tests
```

This command lists all the tests to be performed. Make sure all test are enabled.

To enable a certain test use the following: `./vts_cmd enable_test`
testname

```
./vts_cmd set_global_options [Duration of  
Testing:60,Verbose:Enable]
```

This will run the tests for 60 minutes.

```
./vts_cmd start
```

This will start the testing. You can stop the tests anytime using: `./vts_cmd`
`stop`. Please refer to the SUNvts user guide for more information.