

Hardware Specification Sheet

First Network Group Inc 1-800-578-6381 www.DHCPatriot.com

The DHCPatriot<sup>™</sup> is a broadband subscriber authentication device designed to give network administrators the same visibility on DHCP networks they once had on dial networks.

#### Introduction

The DHCPatriot<sup>™</sup> has been in production since late 2001. As such, there have been several models over the years. The chart below will help in the identification of models, as well as provide hardware specifications and safe capacity information of each model. Beginning with model 2007-1 the model of hardware is noted on the bottom of the device.

All hardware revisions of the DHCPatriot<sup>™</sup> system consist of two identical 1u rack mount devices. All devices are and have been Intel based. At present, all versions of the DHCPatriot<sup>™</sup> software will function on older models.

The IP address usage capacities shown below are based on an average 8 hour lease per IP. The average lease length is computed by adding all the lease lengths together and dividing by the total number of IP addresses configured on the machine.

The number of supported IP addresses shown relates to the average number in use, not the number that may be configured on the system. The DHCPatriot<sup>™</sup> system will not prevent the allocation of further IP addresses beyond the max, however, the system may become unstable. The numbers shown are valid even if one of the devices have failed and only one device from the set is running.

Hardware Models and Specifications							
Model	Year	CPU	RAM	HD	Max IP Address Usage*		
2001-1	2001	Single	256MB	40GB	11200		
2001-2	2002	Single	512MB	40GB	11200		
2003-1	2003	Single	512MB	80GB	11200		
2007-1	2006	Dual	1GB	160GB	16800		
2008-1	2007	Dual	4GB	160GB	67200		
2008-2	2009	Quad	4GB	160GB	67200		
2009-1	2009	Dual	4GB	250GB	67200		
2009-2	2009	Quad	4GB	250GB	67200		
2011-1	2011	Quad	4GB	500GB	144000**		

\* Average 8 hour lease across all configured IP addresses.

\*\* Requires version 5.0.9+

# **Detailed Performance Spec**

The DHCPatriot system supports an absolute sustained maximum of 13 DHCP Queries per second. To ensure no problems, 10 DHCP Queries per second should not be exceeded. The following chart shows at varying lease lengths the number of users that will be supported at 10 DHCP Queries per second. Please note that this assumes hardware model 2011-1.

Lease Length	Renew length	Supported Devices at 10 DHCP QPS
30 minutes	15 minutes	9000
1 hour	30 minutes	18000
2 hours	1 hour	36000
3 hours	1.5 hours	54000
4 hours	2 hours	72000
5 hours	2.5 hours	90000
6 hours	3 hours	108000
7 hours	3.5 hours	126000
8 hours *	4 hours *	144000 *
16 hours	8 hours	288000
24 hours	12 hours	432000
48 hours	24 hours	864000

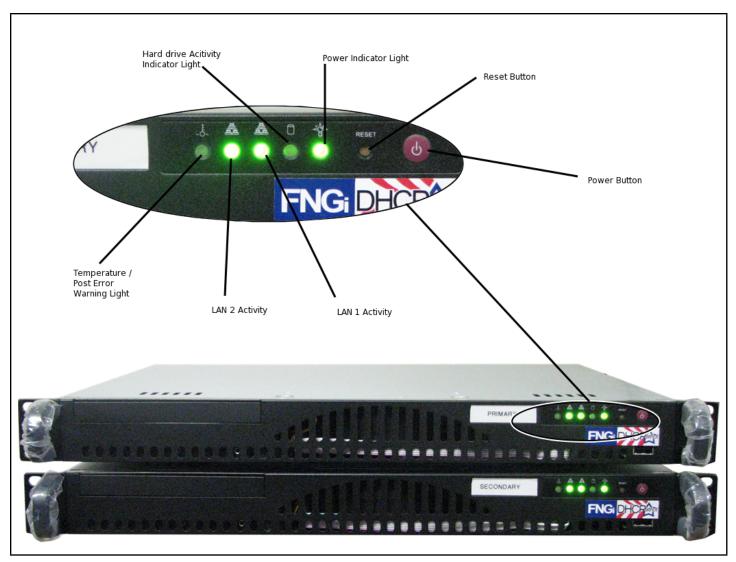
\* FNGi recommended configuration

### Current Model

The DHCPatriot<sup>™</sup> model currently shipped is the 2011-1 model. Throughout the history of the system, backwards compatibility with previous models has been maintained. Any changes to the software required to support the latest hardware have not ended the useful lifespan of earlier hardware revisions. The same is true of 2011-1. The software revision that drives 2011-1 will also effectively function on model 2001-1. Therefore, the DHCPatriot<sup>™</sup> can be considered future proof in a very real sense.

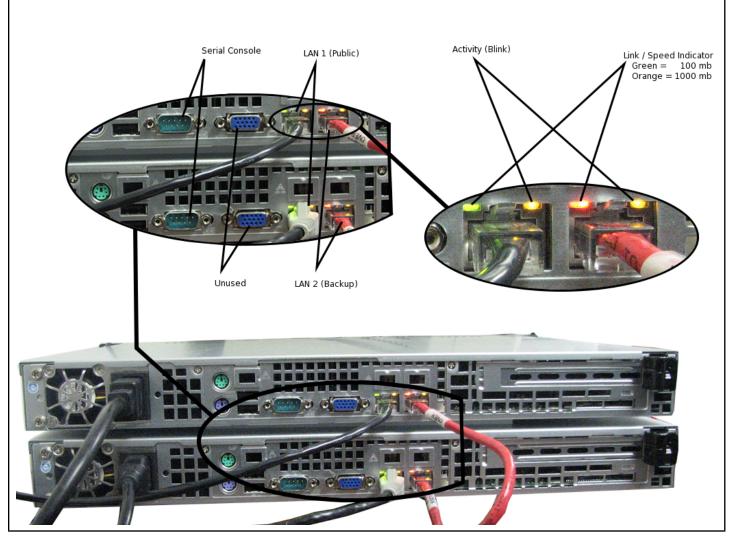
### **Other Hardware Features**

The DHCPatriot<sup>™</sup> system has an array of indicator lights, buttons and ports as shown in the figures below. Some of the ports such as the USB, keyboard, video and mouse ports are unused.



DHCPatriot<sup>™</sup> System front indicator lights

The front of the DHCPatriot<sup>™</sup> device contains several indicator lights and buttons. The power button cycles the power. To power off the device without properly shutting it down (not recommended), it is necessary to hold the button down for 4 seconds. If the device is powered on, the power indicator light will be lit up in green. Merely plugging in the power cable and ethernet cords may cause the LAN 1 and LAN 2 to blink, while the power indicator light is dark. This means that the DHCPatriot <sup>™</sup> device is not powered on, and the power button must be pressed. A pen, pencil or other pointed instrument must be used to press the recessed reset button. Take care not to press to hard damaging the button. The hard drive activity light will blink orange when hard drive activity is present, such as during normal operation of the system. The temperature / post error warning light, if lit up or blinking red, indicates a problem with the system. The system is either to hot, or there is a hardware malfunction.



DHCPatriot<sup>™</sup> System back ports and indicator lights

The back of the DHCPatriot<sup>™</sup> system devices feature ports and indicator lights for integration into the network and visual verification of function. Serial console is available for initial setup and ongoing maintenance of the devices. The DHCPatriot<sup>™</sup> manual available for download on <u>dhcpatriot.com</u>, on the administration interface of the DHCPatriot<sup>™</sup> system itself, or in printed form included with your purchase has further information regarding pinout and other needed information for setting up console access.

The device features two network interfaces. The LAN 1 port is used to connect the device to its home on the host network. Typically, this would be in a server farm with the DHCPatriot<sup>™</sup> system having public IP addresses. LAN 2 connects the DHCPatriot<sup>™</sup> devices to each other via a crossover cable (included). As of model 2003-1, each of these ports is gigabit capable. Each Ethernet port has two indicator lights. The left light may be either green or orange, signifying both link and 100mb or 1000mb respectively. The light on the right, which is yellow, signifies activity on the network by blinking.

It is possible to connect LAN 2 via network infrastructure as long as it is separated from other network traffic by VLANing or other method. Speed should be maintained at 100mb or more as the devices require high speed/bandwidth for data transfers between each other via this link. Using this method, each device could be located in a separate data center for additional redundancy. It should be reasonably certain that this link between the two would not be lost while both devices remain operational. If this happens, data corruption or improper function may occur.

## How to Purchase

The DHCPatriot<sup>™</sup> may be purchased direct, or through one of our reseller partners. If purchased direct, no discount from MSRP will be available.

To purchase through a reseller, please contact your reseller of choice. For a current list of resellers, with contact information, please visit <u>https://www.dhcpatriot.com</u>, email <u>DHCPatriot@network1.net</u> or call 800-578-6381 x7 (419-739-9240 if outside the United States of America) with your request.

To purchase direct or receive pre-sale support, please use the following contact information:

DHCPatriot@network1.net

800-578-6381 x7 (419-739-9240 x7 if outside the United States of America)

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