

Iron Networks Network Virtualization Gateways



Feature Overview

- Systems Center VMM Management plug-in
- Advanced Network Virtualization management console
- NVGRE offloading hardware
- Site-to-Site VPN for Cross-Premises configurations
- Latest generation Sandy Bridge hardware technologies
- Hardware designed to meet the performance requirements of large enterprise and large cloud providers
- High Availability options for zero downtime requirements
- 10Gig Network Interfaces
- Advance OneFace™ appliance management system

The Iron Networks HNV Gateway appliance family supports wide range of models, each of the models are specifically designed to meet the unique technical requirements of Network Virtualization. Our appliances deliver the performance, capacity and availability required in each environment from small to mid-size companies to the largest cloud provider's datacenter.

There are two families of Network Virtualization Gateways – Cross Premises Gateways and On Premises Gateways.

Cross Premises Gateway Series Appliance Platforms

The Iron Networks Cross Premises appliance platform is designed to provide connectivity between private and/or public cloud data centers. Virtual Network segments can be extended across a wide area network via a private network or using the built in IPSEC VPN functionality. Each appliance is a Virtual to non-Virtual network gateway appliance, and the appliances can be interconnected to provide extended virtual networks across WAN networks.

Cross Premises Gateway models include NVGRE hardware offloading, IPSEC hardware offloading and VPN Gateway functionality.

On Premises Gateway Appliance Platforms

The Iron Networks Enterprise Series appliance platform is designed to support LAN network traffic. On premises gateway appliances support network traffic between virtual network segments running on different Hyper-V hosts and traffic between Virtual Networks and Physical Networks. On premises gateways are often installed “top of rack” in data center deployments.

nMVN based models are deployed as standalone units, HA (high-availability cluster editions) can be deployed in high-availability (HA) and network load balancing (NLB) configurations.

On Premises Gateway models include NVGRE hardware offloading, support for multiple tenants routing and is designed with the hardware performance to support multiple 10Gig network connections.



Windows Server 2012

Cross Premises Gateway Series Appliance Platforms

The Iron Networks Cross Premises appliance platform is designed to provide connectivity between private and/or public cloud data centers. Virtual Network segments can be extended across a wide area network via a private network or using the built in IPSEC VPN functionality. Each appliance is a Virtual to Native network gateway appliance, and the appliances can be interconnected to provide extended virtual networks across WAN networks.

Cross Premises Gateway models include NVGRE hardware offloading, IPSEC hardware offloading and VPN Gateway functionality.

Performance Specifications for Capacity Planning

Model-1500



Model-2500



Storage Capacity	500GB	500GB
HNV Optimized Configurations	nHNV-1500C	nHNV-2500C
Deployment Type	Cross Premises	Cross Premises
Site-to-Site VPNs	50	100
Tenants (unique Virtual Network Segments)	3	15
LAN Throughput (Mbps)	2,000	2,000
VPN Throughput (Mbps)	160	160
IPSec Acceleration Rating (TPS)	9000	17,000

Hardware Specifications

Model-1500



Model-2500



Processor	Single, Dual Core i3-2100	Single, Quad Core Xeon E3
Memory	12GB(Max 32GB)	16GB(Max 32GB)
Network Interfaces (RJ45)	6x GbE LAN	4x GbE LAN
Remote HW Management Interface (RJ45)	BMC, IPMI 2.0 compliant	BMC, IPMI 2.0 compliant
Storage – Data (Redundant)	Dual SATA Fixed Disks, Mirroring (RAID-1)	Dual SATA Fixed Disks, Mirroring (RAID-1)
Oneface Embedded Recovery OS (ARRMS)	32GB SATA DOM, Internal	32GB SATA DOM, Internal

LCD w/Keypad Display	Graphical w/6-Keypad	Graphical w/6-Keypad
System IO Ports (VGA/USB/Serial)	1 / 2 / 1	1 / 2 / 1
AC Power Supply	Single Cabled , 250 Watts(80+ Silver) 100 to 240 VAC Auto 47 to 63 Hz, 3A	Single Cabled , 250 Watts(80+ Silver) 100 to 240 VAC Auto 47 to 63 Hz, 3A
Physical Dimensions	Chassis: 19", 2-post rack-mountable Height: 1.66" (1U), 1 rack unit Width: 17.09" Depth: 15.52" Weight: 18 lbs.	Chassis: 19", 2-post rack-mountable Height: 1.66" (1U), 1 rack unit Width: 17.09" Depth: 15.52" Weight: 18 lbs.
Storage Temperature	-40°F to 122°F (-40°C to 50°C) 5% to 95% relative humidity, non-condensing	-40°F to 122°F (-40°C to 50°C) 5% to 95% relative humidity, non-condensing
Operating Temperature	35°F to 95°F (1.7°C to 35°C) 5% to 95% relative humidity, non-condensing	35°F to 95°F (1.7°C to 35°C) 5% to 95% relative humidity, non-condensing
Agency Certifications	Safety: UL, FCC, CE, TUV, CB Environmental: WEEE and RoHS	Safety: UL, FCC, CE, TUV, CB Environmental: WEEE and RoHS
Support and Services	Standard warranty includes 30-day software support with one-year hardware support; upgradable	Standard warranty includes 30-day software support with one-year hardware support; upgradable

On Premises Gateway Appliance Platforms

The Iron Networks Enterprise Series appliance platform is designed to support LAN network traffic. On premises gateway appliances support network traffic between virtual network segments running on different Hyper-V hosts and traffic between Virtual Networks and Physical Networks. On premises gateways are often installed “top of rack” in data center deployments.

Models 3500 and 5500 are the most advanced fault tolerant systems in their class. System components such as hard disk drives, power supplies and cooling fans are fully redundant and hot swappable to ensure the highest possible availability of all the moving parts. In case of a component failure or during routine system maintenance, there is no need to power down a system or stop services to replace a failed component.

nHNV based models are deployed as standalone units, HA (high-availability cluster editions) can be deployed in high-availability (HA) and network load balancing (NLB) configurations.

On Premises Gateway models include NVGRE hardware offloading, support for multiple tenants routing and is designed with the hardware performance to support multiple 10Gig network connections.

Performance Specifications for Capacity Planning

Model-3500

Model-5500



Storage Capacity	500GB	500GB
HNV Optimized Configurations	nHNV-3500o	nHNV-5500o
Deployment Type	Top Of Rack	Top Of Rack
Site-to-Site VPNs	100	200
Tenants (unique Virtual Network Segments)	100	200
LAN Throughput (Mbps)	4,000	8,000
VPN Throughput (Mbps)	1600	1600
IPSec Acceleration Rating (TPS)	9000	17,000

Hardware Specifications

Model-3500



Model-5500



	Model-3500	Model-5500
Processor	Single Processor, Hex Core Xeon	Dual Processor, Hex Core Xeon
Memory	72GB(Max 192GB)	128GB(Max 192GB)
Network Interfaces (RJ45)	8x GbE LAN	8x GbE LAN
Remote HW Management Interface (RJ45)	BMC, IPMI 2.0 compliant	BMC, IPMI 2.0 compliant
Storage – Data (Redundant)	Dual SATA Disk, Mirroring (RAID-1), Hot swap disk drives	Three SAS Disk, Mirroring (RAID-1) + Hot spare, Hot swap disk drives
Oneface Embedded Recovery OS (ARRMS)	32GB SATA DOM	32 GB SATA DOM
NVGRE Offload	TBD	TBD
LCD w/Keypad Display	Graphical w/6-Keypad	Graphical w/6-Keypad
System IO Ports (VGA/USB/Serial)	1 / 2 / 1	1 / 2 / 1
AC Power Supply (Redundant)	Dual Hotswap Redundant, 550 Watts 100 to 240 VAC Auto 47 to 63 Hz, 3A	Dual Hotswap Redundant, 550 Watts 100 to 240 VAC Auto 47 to 63 Hz, 3A
Physical Dimensions	Chassis: 19", 2-post rack-mountable Height: 1.65" (1U), 1 rack unit Width: 17.10" Depth: 25.3" Weight: 44 lbs.	Chassis: 19", 2-post rack-mountable Height: 1.65" (1U), 1 rack unit Width: 17.10" Depth: 25.3" Weight: 44 lbs.
Storage Temperature	-40°F to 122°F (-40°C to 50°C) 5% to 95% relative humidity, non-condensing	-40°F to 122°F (-40°C to 50°C) 5% to 95% relative humidity, non-condensing
Operating Temperature	35°F to 95°F (1.7°C to 35°C) 5% to 95% relative humidity, non-condensing	35°F to 95°F (1.7°C to 35°C) 5% to 95% relative humidity, non-condensing
Agency Certifications	Safety: UL, FCC, CE, TUV, CB Environmental: WEEE and RoHS	Safety: UL, FCC, CE, TUV, CB Environmental: WEEE and RoHS
Support and Services	Standard warranty includes 30-day software support with one-year hardware support; upgradable	Standard warranty includes 30-day software support with one-year hardware support; upgradable

Hardware Warranty: Integrated service and support plans for Forefront powered security appliances

The system has a 30-day warranty that will meet published specifications. The standard hardware depot-repair warranty is for a period of one year. Optional premium support and advance replacement maintenance service plans are also available for 1, 3 and 5 years that extend the hardware and software support warranty.

- Advance hardware replacement plans are available providing new hardware replacements in the case of outages or preventive maintenance of failing components.
- Software Assurance and Help Desk service options are recommended to ensure the appliance is kept updated with the latest software enhancements and to ensure the security and availability of the system.
- Professional services and customized training courses are also available to help provide variety of real-world deployment and troubleshooting experience.

Iron Networks, Inc.

980 Mission Court, Fremont, CA 94539, USA

Phone: +(1) 408-895-5000 (Local), +(1) 877-895-6277 (US-Toll Free), +(1) 408-895-5000 (International)

Fax: +(1) 408-943-8222/8101 Email: info@ironnetworks.com Website: www.ironnetworks.com