

# 2108-N9/D9

## NETOPIA® GIGABIT ETHERNET 802.11N WI-FI® GATEWAY WITH HPNA



### HIGHLIGHTS

#### Easy to setup and use

- Wi-Fi Pairing button for easy Wi-Fi Protected Setup™ Wi-Fi connection
- Supports standard internet browser software

#### Versatile

- Integrated 802.11b/g/n Wi-Fi access point, 2 x 2 antenna array
- Backwards compatible to 802.11b/g
- Compatible with Motorola's 3-D Reach® Wi-Fi adapters for easy expansion of the home local area network

#### Reliable and Secure

- Wi-Fi Security WEP/WPA™/WPA2™
- Advanced firewall with DoS protection and intrusion prevention
- Remote configuration and remote monitoring via TR-069

#### Provider Benefits

- Flexible deployments and pricing options

The high performance gateway for residential or small business consumers requiring an all in one home networking solution that delivers ultra-fast IP triple play services, using existing coax cabling via an integrated HomePNA 3.1 port, leveraging the gateway's integrated Gigabit Ethernet WAN port. The gateway is also equipped with a commercial grade firewall, a four-port Gigabit Ethernet switch and an 802.11n Wi-Fi® access point for secure LAN connectivity.

#### Product Overview

The Motorola Netopia 2108-N9/D9 Gateway is a Gigabit Ethernet 802.11n Wi-Fi gateway designed to offer fast connectivity with the most advanced 802.11n Wi-Fi and Gigabit Ethernet technology.

The 2108-N9/D9 is an ideal Gigabit Ethernet Wi-Fi gateway for deployment in a Gigabit-capable Passive Optical Network (GPON), DSL, or cable modem environment. The 2108-N9/D9 allows users to connect their existing broadband connection to a Gigabit Ethernet WAN port and then use up to four Gigabit Ethernet LAN ports and/or 802.11n integrated Wi-Fi to set up a home network to share printers, data, music, and video files. Support of the latest home networking technology, HomePNA, allows for flexibility in how video is deployed throughout the home. With this full featured gateway, high-speed Internet connectivity is only the beginning. Support for Wi-Fi Multimedia (WMM) assures advanced QoS for Wi-Fi delivery of Voice-over-IP (VoIP), IPTV, and streaming broadcast-quality video.

#### User Friendly Installation

The gateway's friendly installation and ease of use is ideal for consumers who want a gateway that is simple to setup and protects their PC and other networked devices from security threats. The 2108-N9/D9 supports single button Wi-Fi Protected Setup for easy connection to other Wi-Fi enabled devices.

#### Faster Connectivity

Gigabit Ethernet WAN and LAN ports offer faster access to the Internet and to networked home devices. Use of MIMO (multiple-input and multiple-

output) technology with 802.11n enables more reliable and higher-speed Wi-Fi network deployments with backwards compatibility to 802.11b/g clients.

#### Service Assurance

The 2108-N9/D9 gateway with its advanced features help service providers monetize broadband networks while improving efficiency and reducing costs.

Motorola is offering an all-in-one approach to broadband home networking, by combining the highest-performing and lowest cost of ownership gateways in the industry, with comprehensive remote management, high-availability, high-reliability, advanced security, easy-to use Wi-Fi installation and pairing tools.

Motorola CPE (Customer Premises Equipment) are configured to be remotely manageable via industry standard TR-069, which allows the CPE to be interoperable with any ACS solution that follows the Broadband Forum's TR-069/TR-098 specification.

Motorola gateways include advanced security features, such as stateful packet inspection firewall protection, Virtual DMZ, and Denial of Service (DoS) protection. Wi-Fi security mechanisms include 802.11i/WPA2 with Wi-Fi Protected Setup (WPS), MAC® Address Filtering, and closed system mode. Motorola's embedded firmware enables Wi-Fi deployments with high levels of quality, reliability, and customer satisfaction, with low operational and support costs for the service provider.

\*HPNA feature optional.



# Specifications

In addition to delivering high-quality gateways to its customers, Motorola is also committed to helping its customers reduce their environmental footprint. We approach this in several ways: improving the environmental profile of our products, running our operations in a safe and energy-efficient manner and helping our customers to be greener when they use our products.

Motorola's Netopia Gateways help service providers lower their energy consumption, thereby helping them reduce their carbon footprint. Motorola has a global commitment to be part of the solution to climate change, and has worked for years to continually improve our environmental profile. We are in step with our customers and their increasing interest in partnering with a company that helps them reduce their environmental impact, while offering compelling products to help them grow their eco-conscious customer base.

Motorola is working to make products with a reduced environmental impact. In the development of our next-generation Netopia Gateways, we have focused on energy efficiency, lead-free manufacturing, and packaging / recycling enhancements. Depending on models and market, our units are ENERGY STAR qualified and compliant with European Code of Conduct regulations. In addition, the devices and power supplies are lead-free and RoHS compliant. Finally, all new Netopia Gateways use environmentally friendly package designs. They are available in single bulk pack boxes that eliminate the use of suspension plastic and reduce box size, thereby reducing waste and transport costs. Motorola's Netopia gateway packaging is 100% recyclable and is marked with standard recycling codes to make it easier for our customers to identify recycling opportunities.

## INTERFACES

### WAN

10/100/1000 Gigabit Ethernet, RJ-45

### LAN

802.11b/g/n Wi-Fi  
 Four-Port 10/100/1000 Gigabit Ethernet Switch, RJ-45  
 HPNA v3.1 over Coax (2108-N9 only)

## EMBEDDED FIRMWARE

### Encoding and Access Protocols

IEEE 802.3ab  
 DHCP Client or 802.1x Supplicant Authentication

### IP Addressing and Routing

IPv4 (IPv6 Capable)  
 DHCP Server/Relay  
 NS Proxy, Dynamic DNS Support  
 Multiple Subnet Support  
 RIP1, RIP2, RIP3 and Static Routes

### Traffic Management & QoS (Quality of Service)

Network Address Port Translation (NAPT)  
 Application Level Gateway (ALG) Support  
 P Maps (Pinholes)  
 Diffserv QoS with Weighted Fair Queuing  
 IGMPv2, IGMPv3 with Fast Leave  
 IEEE 802.1P/Q VLANs  
 TR-101 Support

### Security

Stateful Packet Inspection Firewall  
 Virtual DMZ/IP Pass-through  
 Denial of Service (DoS) Protection  
 VPN Pass-through (PPTP, L2TP, IPSec)

### Device Management

Three-Level Password Protected Access  
 Statistics and Log Reporting

### Remote Management

TR-069/TR-098, TR-104, WebUI

### Local Management

TR-064, UPnP, WebUI,  
 Ping, Traceroute, Reverse DNS, NTP, Diagnostics

### Localization

English, French  
 Optional: German, Italian, Portuguese (Brazil), Spanish (Latin America)

## WI-FI

IEEE 802.11b/g/n

### Wi-Fi Characteristics

2x2 Omni-directional antennas

### Wi-Fi Features

Multiple BSSID (unique authentication per SSID)  
 Wi-Fi Protected Setup (WPS)  
 Wi-Fi Multimedia (WMM), WMM-PS (power save)  
 Transmit Power Control

### Wi-Fi Security

WEP (64-bit, 128-bit) encryption  
 WPA, WPA-PSK, WPA2-PSK  
 Block Wi-Fi Bridging  
 MAC®Address Filtering

## REGULATORY COMPLIANCE

### Americas

UL 60950, CUL, CSA  
 FCC Part 15 Class B, ICES-003  
 CEC Compliant, ENERGY STAR qualified

### EMEA

EN 60950  
 EN 300 328, EN 301 489  
 RoHS Compliant

## ENVIRONMENTAL SPECIFICATIONS

### Operating Temperature

0 °C to 40 °C (32 °F to 104 °F)  
 20% to 80% (Non Condensing) Relative Humidity

### Storage Temperature

0 °C to 70 °C (32 °F to 158 °F)

### Power Consumption

Max 1.5A at 12VDC

## PHYSICAL SPECIFICATION

### Dimensions

7.7 in H x 4.9 in L x 1.4 in W  
 (196 mm x 125.05 mm x 36 mm)

### Weight

1.2 lbs (544g) (unit carton)

### Placement

Horizontal or Vertical desktop or Vertical wall mount placement

## ORDERING INFORMATION

<b>North America</b>	2108-N9-10NA
	2108-D9-10NA
<b>EMEA</b>	2108-N9-20EU
	2108-D9-20EU



All features, functionality and other product specifications are subject to change without notice or obligation.



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