



# Motorola Netopia®

## 2200 Series

### ADSL2+ Gateways



#### Multiple LAN networking options

Supports single-user households and home networking

#### Customer-friendly installation

CD-less installation makes setup simple

#### Compatible service delivery

Works with most DSL service providers

#### Configured to support Voice-over-IP (VoIP) and streaming video services

#### Video-on-demand (VOD) functionality

Highly integrated design meets sensitive cost targets for large-scale deployments by service providers

#### Service Assurance

By combining the highest-performing and lowest cost of ownership gateways in the industry, with easy-to-use Wi-Fi installation and pairing tools as well as advanced remote management features, Motorola is offering an all-in-one approach to broadband home networking. In addition, Motorola's field-proven NBBS device management software platform provides the service provider with intelligent management, auto-provisioning, and remote management features to improve accuracy, efficiency, and customer satisfaction. These value-adding features enable remote device administration for improved accuracy and reduced support costs. Motorola's NBBS platform is a scalable, carrier-grade software platform that enables cable operators to remotely access, configure, monitor, and troubleshoot their full portfolio of consumer devices, home networks, and services.

The affordable, reliable residential gateway for optimized data, video, and voice.

#### Low Price, High Value

With these low-priced gateways, experiencing high-speed Internet is only the beginning. The 2200 Series has the ability to enable VoIP, experience broadcast quality video, or set up a small home network to share data, music, or video files. They are easy to install and can be automatically configured and remotely managed. The 2200 Series opens up the Internet without the high cost.

#### Affordable Triple-Play for the Home

The Motorola Netopia® 2200 Series ADSL2+ gateways are ideal for the home user who wants an affordable gateway armed with the triple-play power of voice, video, and data service delivery.

#### The Power of Choice

Customers have the choice of connecting through an Ethernet port or a USB port for wired ADSL2+ connection. With available four-port Ethernet switch, the gateway can link multiple computers and devices to share data, music, and video files. Multiple computers can connect to the same network printer and print from anywhere in the home or small office.

#### User-friendly Installation

Motorola's integrated 2200 Series gateways include advanced firewall and encryption protection. The 2200 Series is also equipped with an easy-to-use Motorola Wi-Fi installation wizard, which allows simplified configuration of a secure Wi-Fi connection on a user's machine. When the Wi-Fi wizard is finished, a secure WPA (Wi-Fi Protected Access) encrypted wireless connection is established to the gateway, protecting the user's machine from hacker attacks. Motorola's embedded software enables Wi-Fi deployments with high levels of quality, reliability, and customer satisfaction, with low operational and support costs for the service provider.

## SPECIFICATION SHEET

Motorola Netopia 2200 Series  
ADSL2+ Gateways

## Benefits

### Consumers: High Quality, Flexible Delivery, and Video-on-Demand

The 2200 Series enables high-speed data, VoIP, and IPTV triple-play service delivery with the following benefits:

- **Broadcast-quality video and crystal-clear voice quality** provided by the Motorola VGx Quality-of-Service (QoS) technology
- **Multiple Service delivery from different providers** concurrently delivered to multiple TVs or devices, while maintaining service quality and rapid channel changing through support for TR-101 and IGMPv3
- **VOD functionality** enabled through Real Time Streaming Protocol (RTSP) support

### Service Providers: Remote Management and Troubleshooting, and Cost-Effective Deployment

For the service provider, comprehensive remote manageability, including centralized remote provisioning, troubleshooting, and management, is offered through support of the DSL Forum TR-069 specification.

The 2200 Series gateways are ideal for cost-sensitive mass deployments to residential and small-office subscribers and feature Motorola's legendary ease of use, reliability, and security. The 2200 Series gives providers new opportunities for competitive differentiation and revenue generation.

### The Motorola Netopia 2200 Series ADSL2+ Gateway (2247-62)

The 2247-62 is equipped with a built-in wireless access point for connecting to the Internet from anywhere in the home or small business—and with the four-port Ethernet switch, PCs and laptops in a home network can share the Internet from one IP address. Extra ports can be used to hook up network peripherals like printers or external storage devices.



### The Motorola Netopia 2200 Series ADSL2+ Gateway (2246N-VGx)

The 2246N-VGx is built for the user who wants to branch out. It features a four-port Ethernet switch that allows the user to set up a small network of computers or other Ethernet-enabled devices, as well as enable a VoIP adapter.



## SPECIFICATION SHEET

Motorola Netopia 2200 Series  
ADSL2+ Gateways

With Motorola Netopia 2200 Series ADSL2+ Gateways, users can download music and video files faster and enjoy VoIP and IPTV services, all with the security of Motorola's reliable firewall and quality-of-service standards.



### **The Motorola Netopia 2200 Series ADSL2+ Gateway (2241N-VGx)**

The 2241N-VGx is built for the user who wants to download music and video files faster, and all the while feel secure with Motorola's reliable firewall and quality-of-service standards. It is equipped with two LAN options for connecting a PC or laptop—Ethernet (standard) or USB 1.1.



### **The Motorola Netopia 2200 Series ADSL2+ Gateway (2210-02)**

The 2210-02 is very small, compact, light weight, and equipped with a single Ethernet port for connecting to a laptop or desktop. Download music and video files faster, and feel secure with Motorola's reliable firewall and quality-of-service standards.



## SPECIFICATION SHEET

Motorola Netopia 2200 Series  
ADSL2+ Gateways



### Motorola Cares for the Environment

Motorola believes in "going green" — we have a global commitment to sustainability of the environment. Motorola has been working 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 will help them reduce their carbon footprint, while offering compelling products that will help them grow their eco-conscious customer base.

### Motorola Gateways are Designed to Minimize Their Impact on the Environment

Motorola's 2200 Series gateways comply with international environmental and energy efficient standards — including ADSL L2/L3 low power mode; lead free circuit boards, as certified by RoHS compliance; CEC low power consumption power supplies; ENERGY STAR® qualified power supplies; as well as low power wired and wireless consumption via Wireless Scheduler, which auto disables the gateway's wireless radio and / or places the gateway's Ethernet ports into low power mode, when these are not in use.

## Hardware

### WAN INTERFACE

ADSL2+ RJ-11

### LAN INTERFACE

2210-02	One 10/100 Ethernet (RJ-45)
2220-02	
2241N-VGx	One 10/100 Ethernet (RJ-45),
2251N-VGx	One USB 1.1
2246N-VGx	Four-port 10/100 Ethernet switch (RJ-45)
2256N-VGx	
2247-62	Built-in 802.11b/g wireless
2257-62	Four-port 10/100 Ethernet switch (RJ-45), Wi-Fi Protected Setup (WPS) button

### LEDs

Power, Link, Status, Activity

## Firmware

### ENCODING AND LINE SPEED

ANSI T1.413 Issue 2  
ITU 992.1 (G.dmt) Annex A, B, 992.2 (G.lite), 992.3 ADSL2 (G.dmt.bis), 992.4 ADSL2 (G.lite.bis), 992.5 ADSL 2+

### PROTOCOL SUPPORT

ATM Adaptation Layer 5 (AAL5)  
Up to eight Permanent Virtual Circuits (PVCs)  
Bridged or routed Ethernet encapsulation  
IP multicast pass-through  
PPP over Ethernet gateway/pass-through  
PPP over ATM  
LLC and VC multiplexing  
802.1x WAN Supplicant

### NETWORKING

Bridging and routing functions	Network Address Translation (NAT), IP Maps and Pinholes, Static Routes, IP Multicast Outbound Support Through NAT, DHCP Client, Server, and Relay, DNS Proxy, RIP1 and RIP2 on LAN/WAN, Transparent bridged Ethernet over ATM, TR-101 support
Security	Network Address Port Translation (NAPT), Stateful Firewall, Configurable Firewall Function, Virtual DMZ/IP Pass-through, Denial of Service Protection, Software and Games Control, VPN Pass-through for PPTP, L2TP, and IPSec

### WIRELESS (2247-62 and 2257-62)

Antennas	Omni-directional, with diversity support
3-D Reach® Express Wi-Fi®	
EMEA	100 mW transmit power
North America	200 mW transmit power
Channel Set	
North America	1–11
Europe	1–13
Data Rates	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps with auto-rate fallback
Wireless Security	WEP 64-bit, 128-bit, 256-bit encryption; 802.1x, WPA, WPA-PSK, 802.11i/WPA2, Block Wireless Bridging, MAC Address Filtering, WMM (Wi-Fi Multimedia) Support, Transmit Power Control, Wi-Fi protected setup

## SPECIFICATION SHEET

Motorola Netopia 2200 Series  
ADSL2+ Gateways

## Physical

### QOS AND TRAFFIC MANAGEMENT

VGx Virtual Gateway Technology	
Differentiated Services (Diffserv)	
IEEE 802.1p – Priority Bits	
IEEE 802.1q – VLAN Tagging	
IGMP v2/v3 Snooping/Forwarding with Fast Leave	
TR-111 Support	
Queuing Support	(Weighted Fair Queuing [WFQ], Strict Priority Queuing, and Basic Queuing)
Quality of Service	802.11e WMM (Wi-Fi Multimedia, WMM-PS (advance power saving algorithm for dynamic network traffic environment)

### DEVICE MANAGEMENT

TR-069 remote management	
Remote and local management options using Web UI (HTTP) and CLI (Telnet)	
Two-level password-protected access	
Statistic and log reporting, remote syslog support	
Seven-layer diagnostics	
SNMP v1 and v2	
Utilities	Ping, traceroute, reverse DNS

### WIRED

2241N-VGx/2251N-VGx	
Weight	1.2 lb (550 g)
Dimensions	1.06 in H x 4.36 in W x 5.71 in L (2.69 cm x 11.07 cm x 14.50 cm)
2210-02/2220-02	
Weight	0.9 lb (408 g)
Dimensions	1.2 in H x 3.4 in W x 4.4 in L (3.0 cm x 8.6 cm x 11.2 cm)
Horizontal or vertical desktop placement Wall-mounting keyholes	

### WIRELESS

2246N-VGx/2256N-VGx/2247-62/2257-62	
Weight	1.2 lb (550 g)
Dimensions	1.2 in H x 5.2 in W x 6.8 in L (3.0 cm x 13.2 cm x 17.2 cm)

Specifications are subject to change without notice.

## Regulatory

### COMPLIANCE

FCC Part 68, Part 15, Class B
CE Mark
UL Listed, CSA Approved
European EMC and Immunity
DSL Forum TR-068 support
Industry Canada
RoHS-compliant

## Environmental

### TEMPERATURE

Operating 0 °C to 40 °C (32 °F to 104 °F)
Storage -40 °C to 85 °C (-40 °F to 185°F)

### RELATIVE HUMIDITY

5% to 90%, non-condensing
---------------------------



**MOTOROLA**

Motorola, Inc. 101 Tournament Drive, Horsham, Pennsylvania 19044 U.S.A. [www.motorola.com](http://www.motorola.com)

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. Netopia and 3-D Reach are registered trademarks of Netopia, Inc., a wholly owned subsidiary of Motorola, Inc. Wi-Fi and the Wi-Fi Alliance logo are registered marks of the Wi-Fi Alliance. ENERGY STAR is a registered mark owned by the U.S. Government. All other product or service names are the property of their respective owners. © Motorola, Inc. 2009. All rights reserved.

541635-001-d 06/09 5962 - 0k



Powered by an  
ENERGY STAR®  
qualified adapter  
for a better  
environment

