



# motorola

Model MB7621

## 24x8 Cable Modem



24 downstream channels with Full-band Capture Digital Tuning

Save money! Eliminate monthly modem rental fees.



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### Important Features

#### Fast Internet

24x8 DOCSIS 3.0. 24 bonded downstream channels, up to 24 times the speed of DOCSIS 2.0, and 8 bonded upstream channels\*

Full-band Capture Digital Tuning for high speeds and energy savings

Gigabit Ethernet port for a high-speed plug-in connection to a router, computer, or other Internet-capable device

#### Easy

Installs in minutes using easy Quick Start

Connects fast with just 3 connections - power, coax cable, and Ethernet

Fast activation for XFINITY from Comcast and other popular service providers

#### Flexible

Attractive modem fits where you want it. (2 1/4" wide by 7 1/4" deep by 7 7/8" tall)

DOCSIS 3.0 cable modem compatible with all US cable services

IPv6 and IPv4 network addressing for enhanced compatibility

#### Saves money

Typically saves \$120 per year in cable modem rental fees. (See [www.motorolanetwork.com/services](http://www.motorolanetwork.com/services) to check savings for your service provider.)

Motorola's superior quality and lightning protection protect your investment for years to come.

Two year warranty

#### Works great with routers and more

Plugs easily into any router for shared high-speed Internet access by all your WiFi or Ethernet-capable devices.

Ethernet port can instead provide high-speed connection to a computer, HDTV, game station, or other Ethernet device.

Note: This cable modem does not have a built-in wireless router and does not have telephone jacks for support of voice phone calls.

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## Specifications

### General

#### Cable Modem Service Interface

- F-type female 75  $\Omega$  (standard coaxial connector)

#### Ethernet Interface

- 10/100/1000 Gigabit Ethernet LAN port, with Auto-MDI/MDIX

#### LEDs

- Front Panel:  
Power, Downstream, Upstream, Online, LAN

#### Dimensions

- 2 ¼" wide x 7 ¼" deep x 7 ⅞" tall  
(57 mm x 184 mm x 200 mm)

#### Weight

- 16.3 ounces

#### Power Adapter

- DoE-compliant Level VI energy-saving, UL-listed power adapter with 12 Volt DC, 1.5 Amp output and 100-240VAC universal input
- NEMA 1-15 (North American style) 2-prong plug is provided in the US.

#### Operating Temperature

- 32° to 104° F (0° to 40° C)

#### Certifications

- FCC 15B, Bureau Veritas 60950-1 ITE safety, CableLabs®, cable service providers

#### Surge Protection

- Ruggedized cable and power lightning protection

#### Warranty

- Two years

### Operating Parameters

#### DOCSIS Standards

- DOCSIS 3.0, 2.0, 1.1

#### Downstream

- Data Rate:  
Up to 1029 Mbps\*
- Bonded Channels:  
Up to 24 SCQAM
- Frequency Range:  
108 to 1002 MHz
- Modulation:  
64 or 256 QAM
- Operating Level Range:  
-15 to +15 dBmV

#### Upstream

- Data Rate:  
Up to 246 Mbps\*
- Bonded Channels:  
Up to 8 SCQAM
- Frequency Range:  
5 to 42 MHz
- Modulation:  
QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM
- Operating Level Range:  
+65 dBmV (64 QAM, single channel)  
+57 dBmV (64QAM, 4-8 channels)  
+65 dBmV (16 QAM, single channel)

#### Network Protocols

- IPv4, IPv6, TCP, UDP, ARP, ICMP, DHCP, FTP, TFTP, SNMP, HTTP

#### Application Protocol

- SNMP v1/v2/v3

#### DHCP Client

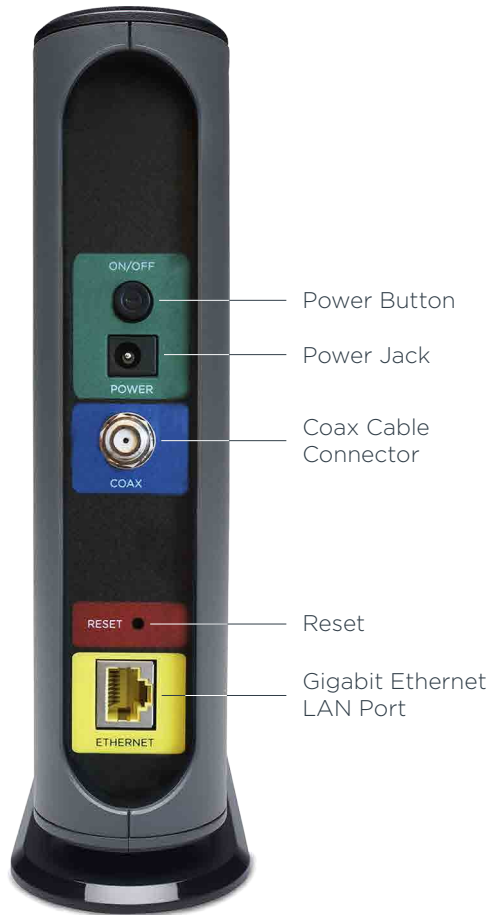
- Automatically retrieves IP and DNS server address from DHCP server through WAN connection

#### Management

- Web-based management interface utility

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## Cable Modem Back Diagram



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## System Requirements

- The cable modem must be connected to a cable modem service that uses any of the DOCSIS standards – 3.0, 2.0, 1.1

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## Package Contents

- Cable Modem
- Power Cube (UL listed)
- Ethernet Cable (Cat 5e)
- Velcro® Cable Tie
- Coax Connection Tool
- Quick Start Flyer

\* 1029/246 Mbps is the maximum nominal download/upload speed for 24x8 DOCSIS 3.0 cable modems. Actual speeds depend on a number of factors including the speed of your cable modem service, and will typically be slower. Speeds cannot exceed the speed of the Gigabit Ethernet port.

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MTRLC LLC  
PO BOX 121147 Boston, MA 02112-1147  
E-mail: [sales@motorolanetwork.com](mailto:sales@motorolanetwork.com)  
Phone: 1-800-753-0772



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