



MB7420

16x4 686 Mbps Cable Modem

The Motorola Model MB7420 cable modem meets the cable industry's DOCSIS 3.0 standard for speeds up to 686 Mbps, and also works with lower-speed DOCSIS 2.0 and 1.1 services. Full-Band Capture Digital Tuning allows service providers to offer more channels and accelerate downloads.

This modem can be plugged into the Ethernet port of a Windows, Mac, or Linux computer, an HDTV, a game station, or other Ethernet-capable device. The MB7420 can also be plugged into a wired or wireless router for sharing of your high-speed service with multiple devices. With its easy installation, high speed, and broad compatibility, the MB7420 is the perfect choice for almost any cable modem user.

Package Contents

- Cable Modem • Power Cube • Ethernet Cable
- Velcro® Cable Organizer • Coax Connection Tool
- Quick Start Flyer

Features

Easy installation

Fast data speed – Up to 686 Mbps downstream and 123 Mbps upstream with bonding of up to sixteen channels downstream and four channels upstream. Full-Band Capture Digital Tuning lets service providers deliver faster, more reliable Internet.

Fast 10/100/1000 Base-T Ethernet connectivity – Supports very fast DOCSIS 3.0 data transfers and provides compatibility and easy installation with almost any computer, wired and wireless routers, HDTVs, game stations, and other Ethernet-capable devices.

Supports IPv4 and IPv6 – Support for the latest Internet addressing keeps your equipment current.

Five status-reporting LEDs – LAN, Online, Upstream, Downstream, and Power lights allow easy status monitoring.



DOCSIS 3.0 compatible, and compatible with earlier standards – Provides support for the latest data-over-cable standard DOCSIS 3.0, as well as DOCSIS 1.1 and 2.0, to ensure operation and compatibility with all U.S. operators. DOCSIS (Data Over Cable Service Interface Specification) is the industry standard for transmission of Internet data over cable-based systems in the U.S. and many other countries.

SNMP v1/v2/v3

Compact, space-saving design

Experienced, U.S.-based technical support

Certified by CableLabs®, Comcast XFINITY®, Time Warner Cable®, and other service providers

Two year warranty

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Specifications

General

Cable Modem Service Interface:	F-type female 75 Ω (standard coaxial connector)
Ethernet LAN Interface:	RJ-45 10/100/1000 Mbps Ethernet, with Auto-MDI/MDIX
Status Indicators:	Ethernet link, Connection status, Upstream link, Downstream link, Power
Size:	6.1" H x 4.9" D x 2" W (155mm x 124mm x 51mm)
Weight:	9.3 ounces (264 grams)
Power Adapter:	DoE-compliant Level VI energy-saving, UL-listed power adapter with 12 Volt DC, 1 Amp output and 110VAC nominal input. NEMA 5-15 (North American style) plug is provided in the US.
Operating Temperature:	32° to 104° F (0° to 40° C)
Certifications:	FCC part 15B, Bureau Veritas 60950-1 ITE safety, CableLabs®, cable service providers
Surge Protection:	Ruggedized cable and power lightning protection
Warranty:	Two years

Operating Parameters

Downstream:	
Data Rate*:	Up to 686 Mbps (16 channels), Up to 43 Mbps (single channel)
Frequency:	108 to 1002 MHz (edge to edge)
Modulation:	64 or 256 QAM
Operating Level Range:	-15 to +15 dBmV
Upstream:	
Data Rate*:	Up to 123 Mbps (4 channels), Up to 31 Mbps (single channel)
Frequency:	5 to 85 MHz (edge to edge)
Modulation:	QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Operating Level Range:	A-TDMA: +8 to +54 dBmV (32QAM, 64QAM) +8 to +58 dBmV (QPSK) S-CDMA: +8 to +53 dBmV (all modulations)
Security:	DOCSIS 3.0 Security (BPI+, EAE, SSD)
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 at ISP
ToD (RF868):	ToD support for local and MSO time synchronization
TFTP Client:	TFTP support for cable modem configuration file download
Management:	Web-based management interface utility
Core Chipset:	Broadcom BCM33843D