MOTOROLA

SB5120 SURFboard® Cable Modem

Prepare to experience the Internet without limits and put the power of broadband to work for you with a Motorola cable modem

HIGHLIGHTS

Compatible with Windows 95/98/2000/ME/NT/XP, Mac®, Linux®, and UNIX®

DOCSIS 1.1- and 2.0-certified

Integrated A-TDMA and S-CDMA technology for up to 30 Mpbs upstream data rate

WHQL-certified USB drivers for Windows® 2000/ME/XP

New, stylish industrial design saves valuable desk space

Front-panel status LEDs and built-in HTML-based diagnostics for quick and easy troubleshooting

USB and Ethernet connectivity simplifies installation

Supports up to 32 users (one via USB and 31 via Ethernet or 32 users on Ethernet)

Capable of downloading at speeds up to 100 times faster than 28.8k analog phone modem*

No telephone lines needed—always on, always connected

Motorola's next-generation SURFboard Cable Modem (SB5120) incorporates the latest DOCSIS® 2.0 Advanced Time Division Multiple Access (A-TDMA) and Synchronous Code Division Multiple Access (S-CDMA) technologies to provide up to three times greater upstream capacity than DOCSIS 1.0/1.1 systems. Packed with power, the SB5120 is interoperable and backward-compatible with DOCSIS 1.0 and 1.1 for a fast and timely transition. Operators can deploy the SB5120 today without a service interruption. The Motorola SURFboard SB5120 is flexible, allowing operators to maximize their current infrastructure investments and also offer additional cost-effective services, all at the same time. Convenient for both operators and end-users alike, the SURFboard SB5120 ensures end-user security via a top-mounted Standby switch that quickly isolates the USB and Ethernet connection to the PC without disconnecting the cable modem from the RF network. What's more, the SB5120 simplifies troubleshooting with its front-panel status indicator LEDs and integrated HTML diagnostics page.

The SURFboard SB5120 is competitively priced and includes many of the valuable features found in previous SURFboard models, such as USB and Ethernet connectivity, software upgrades available over the network, proven field reliability, a quality, advanced RF design, and a high-performance processor.

Highly functional and attractive, the Motorola SURFboard SB5120 features a new, compact design that is a stylish and clutter-free addition to virtually any desktop.

SB5120 SURFBOARD CABLE MODEM

GENERAL SPECIFICATIONS

Cable Interface	F-connector, female, 75 Ω
CPE Network Interface	USB, 10/100Base-T Ethernet
Data Protocol	TCP/IP
Dimensions	6.2 in H x 2.3 in W x 6.0 in D (15.75 cm x 5.84 cm x 15.24 cm)
Power	9 W (nominal)

INPUT POWER

North America	105 to 125 VAC, 60 Hz
Outside North America	100 to 240 VAC, 50 to 60 Hz

ENVIRONMENTAL

Operating Temperature	32 °F to 104 °F (0 °C to 40 °C)
Storage Temperature	−22 °F to 176 °F (−30 °C to 80 °C)
Operating Humidity	0% to 95% R.H. (non-condensing)

DOWNSTREAM

Modulation	64 or 256 QAM
Maximum Data Rate*	38 Mbps
Bandwidth	6 MHz
Symbol Rate	64 QAM 5.069 Msym/s, 256 QAM 5.361 Msym/s
Operating Level Range	−15 to 15 dBmV
Input Impedance	75 Ω (nominal)

UPSTREAM

Modulation	8***, 16, 32***, 64***, 128*** QAM or QPSK
Maximum Channel Rate**	30 Mbps
Bandwidth	200 kHz, 400 kHz, 800 kHz, 1.6 MHz, 3.2 MHz, 6.4*** MHz
Symbol Rates	160, 320, 640, 1280, 2560, and 5120*** ksym/s
Operating Level Range	
A-TDMA	8 to 54 dBmV (32 QAM, 64 QAM)
	8 to 55 dBmV (8 QAM, 16 QAM)
	8 to 58 dBmV (QPSK)
S-CDMA	8 to 53 dBmV (all modulations)
Output Impedance	75 Ω (nominal)
Frequency Range	5 to 42 MHz (edge to edge)
Compatibility	
PC	80486, Pentium, or later; Windows® 2000 or XP or Linux with Ethernet connection (older versions of Windows, although not specifically supported, will work with this cable modem)
Macintosh	Power PC or later; OS 8 or higher; Ethernet connection
UNIX	Ethernet connection
Home Networking	Ethernet router or wireless access point

* Actual speeds will vary, and are often less than the maximum possible. Data transmission speed is approximate and depends on the configuration and capacity of your network, as well as the amount of traffic on the network.

** Actual data throughput will be less due to physical layer overhead (error correction coding, burst preamble, and guard interval).

*** With A-TDMA- or S-CDMA-enabled CMTS.

**** With S-CDMA-enabled CMTS.

Certain features may not be activated by your service provider, and/or their network settings may limit the feature's functionality. Additionally, certain features may require a subscription. Contact your service provider for details.

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