

SB5101 Cable Modem

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

SPECIFICATION SHEET



HIGHLIGHTS

Compatible with Windows®, Macintosh®, and Unix® computers

DOCSIS® 1.1 and 2.0 Certified

10/100Base-T Ethernet (RJ-45) and USB high-speed data ports

Ethernet and USB cables included

Installation Assistant program on CD-ROM guides you through installation on the PC

Top-mounted Standby switch for increased security

Front-panel LEDs indicate status and simplify troubleshooting

User-friendly online diagnostics page

Supports standard Internet software

Supports up to 63 computers on a single Internet connection (additional networking hardware required)

Remote configuration and monitoring from the headend using SNMP and TFTP

Stylish and space-saving enclosure

Multi-language User Guide on CD-ROM



Easy to use. The Motorola SB5101 cable modem unlocks the potential of offering high-speed data service to consumers. Consumers can get their favorite Web sites quickly, download graphics with unbelievable ease, and enjoy real-time interactive PC gaming and expand console gaming with broadband Internet access from the cable modem market leader — Motorola.

Motorola's next-generation SB5101 cable modem is powerful, convenient, flexible, simple to install, and easy to use. It incorporates DOCSIS® 2.0 technology, providing up to three times the upstream capacity of DOCSIS 1.0 or 1.1 — allowing consumers to surf the Internet at as much as 30 Mbps. For a smooth transition, the SB5101 is backwards compatible with DOCSIS 1.0 and 1.1. Operators can deploy the SB5101 without service interruption, maximizing their current infrastructure investment while simultaneously offering new value-added services.

Motorola's SB5101 cable modem is convenient for operators and end-users alike — high-speed Internet access is always at one's fingertips. Always on and always connected, a cable modem is much faster than a traditional dial-up modem. It enables one to enjoy the Internet the way it should be — surfing, downloading, working, shopping, gaming, and e-mailing is made faster and easier with the SB5101.

Installation couldn't be simpler — just connect the coaxial cable to the SB5101 using an existing cable outlet, then connect the power, and lastly connect the PC to the SB5101 cable modem via either Ethernet or USB port. Trouble-shooting is a breeze too, thanks to front panel status indicator LEDs and an online diagnostics page. In addition, the SB5101 is equipped with a top-mounted Stand-by switch provides users with increased security, enabling them to disconnect from the Internet when the cable modem is not in use.

Once consumers have experienced broadband powered by the Motorola SB5101 cable modem, they'll never want to go back to dial up again! With the power and speed of the Motorola SB5101 cable modem, consumers will be surfing the web like never before.

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GENERAL SPECIFICATIONS

Cable Interface	F-Connector, female, 75 Ω
CPE Network Interface	USB, Ethernet 10/100Base-T
Data Protocol	TCP/IP
Dimensions	6.2 in (15.75 cm) H x 2.3 in (5.84 cm) W x 6.0 in (15.24 cm) L
Power	9W (nominal)
Input Power	
North America	105 – 125 VAC, 60 Hz
International	100 – 240 VAC, 50 – 60 Hz

DOWNSTREAM

Modulation	64 or 256 QAM
Maximum Data Rate*	38 Mbps (256 QAM at 5.361 Msym/s)
Bandwidth	6 MHzp
Symbol Rate	64 QAM 5.057 Msym/s, 256 QAM 5.361 Msym/s
Operating Level Range	-15 to +15 dBmV
Input Impedance	75 Ω (nominal)
Frequency Range	88 to 860 MHz

UPSTREAM

Modulation	8***, 16, 32***, 64***, 128**** QAM or QPSK
Maximum Channel Rate**	30 Mbps (64 QAM at 5.120 Msym/s)
Bandwidth	200 kHz, 400 kHz, 800 kHz, 1.6 MHz, 3.2 MHz, 6.4**** MHz
Symbol Rates	160, 320, 640, 1280 and 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)

ENVIRONMENTAL

Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Storage Temperature	-30 °C to 80 °C (-22 °F to 176 °F)
Operating Humidity	5 to 95% R.H. (non-condensing)

* 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.



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