

SB5101E 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

Euro-DOCSIS 2.0 based

Integrated A-TDMA and S-CDMA technology — capable of providing up to 30 Mbps upstream data rate

WHQL certified USB drivers for Windows® 2000/Me/XP

New stylish case 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

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

Supports up to 32 users (1 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



Easy to use. The Motorola SB5101E 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 SB5101E cable modem is powerful, convenient, flexible, simple to install, and easy to use. It incorporates EURODOCSIS® 2.0 technology, providing up to three times the upstream capacity of EURODOCSIS 1.0 or 1.1 — allowing consumers to surf the Internet at as much as 30 Mbps. For a smooth transition, the SB5101E is backwards compatible with EURODOCSIS 1.0 and 1.1. Operators can deploy the SB5101E without service interruption, maximizing their current infrastructure investment while simultaneously offering new value-added services.

Motorola's SB5101E 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 SB5101E.

Installation couldn't be simpler — just connect the coaxial cable to the SB5101E using an existing cable outlet, then connect the power, and lastly connect the PC to the SB5101E 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 SB5101E is equipped with a top-mounted Stand-by switch that 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 SB5101E cable modem, they'll never want to go back to dial up again! With the power and speed of the Motorola SB5101E cable modem, consumers will be surfing the web like never before.

SB5101E Cable Modem

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: | 100 to 240VAC, 50 to 60Hz |
| 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 | 0 to 95% R.H. (non-condensing) |

DOWNSTREAM

| | |
|------------------------|---|
| Modulation: | 64 or 256 QAM |
| Maximum Data Rate:* | Up to 51 Mbps |
| Bandwidth: | 8 MHz |
| Symbol Rate: | 64 QAM 6.952 Msym/s, 256 QAM 6.952 Msym/s |
| Operating Level Range: | 64 QAM 43 to 73 dB μ V, 256 QAM 47 to 77 dB μ V |
| Input Impedance: | 75 Ω (nominal) |
| Frequency Range: | 108 to 860 MHz |

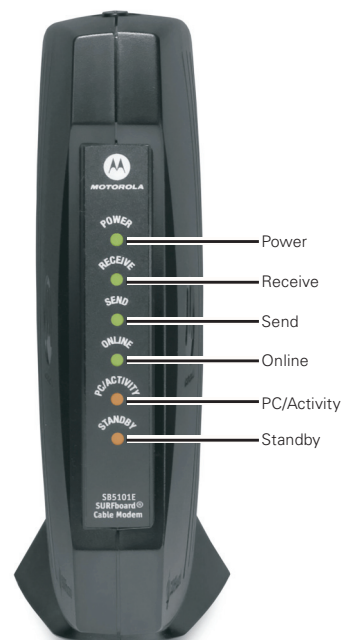
UPSTREAM

| | |
|------------------------|--|
| Modulation: | 8***, 16, 32***, 64***, 128*** QAM or QPSK |
| Maximum Data Rate:** | Up to 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: | 68 to 114 dBmV (32 QAM, 64 QAM) 68 to 115 dBmV (8 QAM, 16 QAM) 68 to 118 dBmV (QPSK) |
| S-CDMA: | 68 to 113 dBmV (all modulations) |
| Output Impedance: | 75 Ω (nominal) |
| Frequency Range: | 5 to 65 MHz (edge to edge) |

*When comparing download speeds with a traditional 28.8k analog modem. Actual speeds will vary, and are often less than the maximum possible. Upload and download speeds are affected by several factors including, but not limited to: network traffic and services offered by your cable operator or broadband service provider, computer equipment, type of server, number of connections to server, and availability of Internet router(s).

**Actual speeds will vary. Speeds of 30 Mbps are only attainable with A-TDMA or S-CDMA technology.

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



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