# SURFboard® Cable Modem

## With user-friendly enhancements, Motorola's SURFboard SB4101 Cable Modem is made for the marketplace.

The latest addition to Motorola's SURFboard Cable Modem family, the SURFboard SB4101, has been redesigned with the consumer in mind. The Motorola SURFboard SB4101 now features a user-friendly, convenient top-mounted stand-by switch. The stand-by switch disconnects the USB and Ethernet connection to the CPE without disconnecting the cable modem from the RF network, providing security, flexibility and performance. Competitively priced, the SB4101 includes all the features of previous SURFboard Cable Modems, including USB connectivity, software upgrades available over

the network, advanced RF design, top-notch field reliability and highperformance processors. It offers both Ethernet and USB interface

connectivity to help ensure compatibility with almost any PC or Macintosh network-ready computer system. And its 10/100BaseT auto sensing Ethernet lines allows for seamless communications. Plus, it's hardware-ready to support DOCSIS 1.1 specifications, ensuring advanced Quality of Service (QoS).



> DOCSIS 1.0 CableLabs certified



SB4101

- User-friendly, top-mounted stand-by switch enhances security and convenience
- New LED added to front panel to indicate stand-by status
- USB network connectivity simplifies installation
- Capable of downloading at speeds up to 100 times faster than a 28.8k analog phone modem\*
- No telephone lines neededalways on, always connected
- Compatible with Windows 95/98/2000/Me/NT/Mac/UNIX
- Supports up to 32 users-ideal for home and small businesses
- > WHQL approved



 Attractive vertical design saves desk space



### FEATURES

- DOCSIS 1.1 hardware based
- > USB for Windows 98/2000/Me
- Supports up to 32 users (1 via USB and up to 31 via Ethernet)
- Ethernet and USB connections are bridged allowing LAN traffic between USB device and Ethernet LAN
- > 10/100BaseT Ethernet (auto sensing)
- > Remote management via SNMP
- > Software upgradeable over the network
- ► Internal power supply
- Top-mounted stand-by switch enhances network security to end-user
- Platform independent modem with HTML-based user interface for status troubleshooting
- Front panel LEDs for easy troubleshooting
- > Multi-language user guide
- > Global safety approval & certificates:
  - CB scheme (EN60950/IEC950)
  - CE-Evaluation test report (EN55022/EN55024)
  - UL approved
  - Microsoft WHQL approved
  - FCC Part 15

## SPECIFICATIONS

#### DOWNSTREAM

Demodulation	64 or 256 QAM
Maximum Data Rate*	38 Mbps
Bandwidth	6 MHz
Symbol Rate	64 QAM 5.069 Msym/s
Symbol Rate	256 QAM 5.361 Msym/s
Operating Level Range	-15 to +15 dBmV
Input Impedance	75 $\Omega$ (nominal)
Frequency Range	88 to 860 MHz

#### **UPSTREAM**

Modulation
Maximum Data Rate
Bandwidth
1.6 MHz, 3.2 MHz
Symbol Rates
2560 ksym/s
Operating Level Range +8 to +55 dBmV (16QAM)
+8 to +58 dBmV (QPSK)
Output Impedance $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots .75 \Omega$ (nominal)
Frequency Range 5 to 42 MHz (edge to edge)

#### GENERAL

Cable Interface	F-Connector, Female, 75 $\Omega$
CPE Network Interface.	USB, Ethernet 10/100BaseT
	(auto sensing)
Data Protocol	TCP/IP
Dimensions	7.2" H x 2.0" W x 7.8" L
Power	9 Watts (nominal)
Input Power	100 - 240 VAC, 50 - 60 Hz

#### **ENVIRONMENTAL**

Operating Temperature	. 0° to 40° C
Storage Temperature	30° C to 80° C
Operating Humidity	. 0 to 95% R.H. (non-condensing)

## CONCLUSION

Designed with the consumer in mind, the Motorola SB4101 cable modem is ready for high speed surfing. It's competitively priced and equipped with a top-mounted stand-by switch for enhanced end user security. The SB4101 simplifies installation with its USB interface and is also hardware-ready to support DOCSIS 1.1 specifications, ensuring advanced Quality of Service (QoS), excellent performance, seamless functionality, exceptional value... that's innovative technology.

\* When compared to traditional 28.8k analog modems. 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).

MOTOROLA, the Stylized M Logo and all other trademarks indicated as such herein are trademarks of Motorola, Inc. ® Reg. U.S. Pat. & Tm. Off. All other product or service names are the property of their respective owners. © 2001 Motorola, Inc. All rights reserved. Printed in the U.S.A. 101 Tournament Drive, Horsham, PA 19044 800.523.6678 www.motorola.com/broadband J-5367-601-5K