SURFboard® SB4220 Cable Modem

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Motorola's next generation, SURFboard SB4220 Cable Modem, incorporates the latest DOCSIS 2.0 Advanced Time Division Multiple Access (A-TDMA) technology that provides up to 30 Mbps upstream data rate in a DOCSIS 1.1 certified cable modem. Competitively priced, the SB4220 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 high-performance processors. The Motorola SURFboard SB4220 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 and flexibility. It offers both Ethernet and USB interface connectivity to help ensure compatibility with almost any PC or Macintosh network-ready computer system.

With next generation A-TDMA technology built-in, the Motorola SURFboard SB4220 Cable Modem offers incredible performance at a competitive price.

HIGHLIGHTS INCLUDE:

- DOCSIS 1.1 certified

- WHQL certified USB drivers for Windows 98/2000/Me/XP

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

- LED on the 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 needed — always on, always connected

- Compatible with Windows 95/98/2000/Me/NT/XP/Mac/UNIX

- Supports up to 32 users (1 via USB and up to 31 via Ethernet or 32 users on Ethernet)

- Attractive vertical design saves desk space

GENERAL SPECIFICATIONS

Downstream

Modulation:	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 Ω (nominal)
Frequency Range:	88 to 860 MHz

Upstream

Modulation:	16, 32***, 64*** QAM or QPSK
Maximum Data 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:	+8 to +55 dBmV (16 QAM) +8 to +58 dBmV (QPSK)
Output Impedance:	75 Ω (nominal)
Frequency Range:	5 to 42 MHz (edge to edge)

General

Cable Interface:	F-connector, female, 75 Ω
CPE Network Interface:	USB, Ethernet 10/100Base-T
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˚ to 80˚ C
Operating Humidity:	0 to 95% R.H. (non-condensing)

FEATURES

- Integrated A-TDMA technology
- Supports up to 32 users (1 via USB and up to 31 via Ethernet or 32 users on Ethernet)
- Ethernet and USB connections are bridged allowing LAN traffic between USB device and Ethernet LAN
- 10/100Base-T Ethernet
- 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 and certificates:
  - CB scheme (EN60950/IEC950)
  - CE-Evaluation test report (EN55022/EN55024)
  - FCC Part 15
  - UL 1950

CONCLUSION

Designed with the consumer in mind, the Motorola SURFboard SB4220 Cable Modem enables you to take advantage of next generation cable modem technology and performance today. It's competitively priced and equipped with a top-mounted stand-by switch for enhanced end user security. The SB4220 simplifies installation with its USB interface and is also DOCSIS 1.1 certified, ensuring advanced Quality of Service (QoS), excellent performance, seamless functionality, exceptional value… that's innovative technology.

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