



# Motorola SURFboard<sup>®</sup> DOCSIS<sup>®</sup> 3.0 Digital Modem (SBV6120)



The Motorola SURFboard Digital Voice Modem (SBV6120) is DOCSIS 3.0 compliant. It enables a cable operator to provide their customers advanced multimedia services through additional upstream and downstream bandwidth availability. It uses industry standard signaling protocols to provide high-speed internet access and up to two lines of full-featured digital voice telephone service over cable's broadband connection to the home. It provides them with an economic option for greater than 160 Mbps of user data throughput, without the need for a hybrid fiber coax (HFC) plant upgrade. The SBV6120 supports both IPv4 and IPv6, and Advanced Encryption Services as part of the DOCSIS 3.0 standards.

The SBV6120's enhanced tuner supports up to a 1 GHz downstream input, allowing cable operators to increase the frequency spectrum for data services. It is backwards compatible to DOCSIS 1.0, 1.1, 2.0 and can be deployed without service interruption, maximizing current infrastructure investment and enabling deployment of new value-added services. By combining multiple services in one unit, consumers can enjoy an efficient solution that offers many advantages over competing technologies.

The SBV6120 connects to a computer through a 10/100/1000 Base-T (RJ-45) Ethernet and provides intuitive, easy to read front panel operational status LEDs for: power, receive, send, online, voice, and PC connectivity. Operators can optionally activate dual colored LEDs for a customer to have visual verification of bonded channels and a GigE link.

The SBV6120 unlocks the potential of offering innovative, high bandwidth data, digital voice, and multimedia services to cable's broadband customers. These include:

- Helping protect an operators' installed base of high-speed data customers .
- Delivering high-bandwidth, multimedia services .
- Delivering competitive, high-capacity commercial services to business customers .
- Expanding network addressing capability using IPv6 addresses .
- Utilizing upgraded plant spectrum, to 1 GHz, for downstream data services
- It's designed for Service Assurance – Quality of Service at the edge of the network – compatible with Motorola's Element Management system, and with Motorola's eCare for remote access customer component troubleshooting and configuration.



### Product Highlights:

- Easy to use and simple to set up
- Plug-and-play installation
- Front-panel, easy-to-read LEDs for power, receive, send, online, voice, and PC connectivity
- Color Coded connection panel to facilitate installation and troubleshooting
- Intuitive, built-in Web-based diagnostics for quick and easy troubleshooting
- Up to two telephone lines (RJ-11) of full-featured telephone service
- A 10/100/1000 Base-T (RJ-45) Ethernet port
- Support for CLASS services (Caller ID, call waiting, three-way calling, etc.)
- Automatic fax modem processing
- SNMP and TFTP support for remote configuration and monitoring
- DOCSIS 3.0 compliant. DOCSIS 2.0 and PacketCable™ 1.0/1.5 certified; interoperable with DOCSIS 1.0 and 1.1 and PacketCable 1.0; and firmware upgradeable to PacketCable 2.0.
- Network Call Signaling (NCS) and Session Initiation Protocol (SIP) support (field-upgradeable software)
- Configurable to meet multiple telco market standards (ETSI harmonized impedance, 600 Ohms)
- Support for G.711, G.729, and other low-rate vocoders
- Capable of supporting Wide-Band Audio



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