

## **SURF**board

**High-Speed Cable Modems** 

## SB6183 Cable Modem

## Features:

- Advanced Services Ready
- DOCSIS 3.0 Channel Bonding of up to 16 downstream and four upstream channels capable of data rates of 686 Mbps in the received (downstream) data stream and over 100 Mbps in the send (upstream) data stream
- 1 GHz-capable tuner
- Use of full downstream bandwidth to capture up to 16 DOCSIS channels for bonding
- Provides Spectrum Analyzer capability in every home
- RF Immunity, built into SURFboard products since 2006, protects against potential service impacting interference
- MoCA reject filter ensures carefree interoperation of MoCA and DOCSIS networks
- Gigabit Ethernet port, with 802.3az Energy Efficient Ethernet



## **Product Overview**

Strengthen your Broadband Leadership — Count on ARRIS SURFboard DOCSIS® 3.0 solutions to deliver innovative, ultra-broadband data services with reliable, high quality products. The SB6183 provides up to 16 bonded downstream channels for download speeds up to 686 Mbps.





GENERAL SPECIFICATIONS	
Cable Interface	F-Connector, female 75 $\Omega$
Network Interface	Single One-Gigabit (10/100/1000) Ethernet port
Dimensions	5 (h) x 2.1 (w) x 5 (l) in (127 x 51 x 127 mm)
Regulatory	RoHS compliant, FCC, UL listed (U.S. and Canada), Industry Canada
DOCSIS 3.0	BCM3383D
Power	
North America	105 to 125 VAC, 60 Hz
Outside North America	100 to 240 VAC, 50 to 60 Hz
Power Management	802.3az EEE, PSU is Energy Star Category 5
Environmental	
Operating Temperature	32 F to 104 °F (0 °C to 40 °C)
Storage Temperature	–22 °F to 158 °F (–30 °C to 70 °C)
Operating Humidity	5 to 95% R.H. (non-condensing)
DOCSIS Downstream	
Modulation	64 or 256 QAM
Capture Bandwidth	Full Bandwidth Capture Window 108 MHz – 1002 MHz
Maximum Theoretical Data Rate	686.144 Mbps (16 channels) / 42.884 (single channel) @ 256 QAM at 5.36 Msym/s
Symbol Rate	64 QAM 5.057 Msym/s; 256 QAM 5.361 Msym/s
Operating Level Range	−15 to 15 dBmV
Bonded Channel RF Level Tolerance	10dBmV
Frequency Range	108 – 1002 MHz (edge to edge) Optional 90 MHz – 1002 MHz (edge to edge)
Frequency Plans	DOCSIS Annex B
Security	DOCSIS 3.0 Security (BPI+, EAE, SSD)
Network Management	SNMP v2 & v3
Provisioning	IPv4 or IPv6 (dual stack) DS Lite

DOCSIS Upstream	
Modulation	QPSK and 8, 16, 32, 64, 128 QAM, optional 256 QAM
Maximum Channel Rate	131.072 Mbps (4 channels) /32.768 Mbps (single channel): @ 128 QAM at 6.4 MHz
Channel Width	200 kHz, 400 kHz, 800 kHz, 1.6 MHz, 3.2 MHz, 6.4 MHz
Symbol Rates	160, 320, 640, 1280, 2560, 5120 ksym/s
Frequency Range	5-42 MHz (edge to edge)
Compatibility	
PC	Windows XP, Windows 7, Windows 8, connection (older versions of Windows, although not
	specifically supported, will work with this cable modem), UNIX, Linux®
Macintosh	

All features, functionality, and other product specifications are subject to change without notice or obligation.

For information on additional SURFboard products please visit www.SURFboard.com

For product support please visit www.arris.com/consumers



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