

# SURFBOARD® SB6183 CABLE MODEM

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 fordownload speeds up to 686 Mbps.

# **Highlights**

- Advanced Services Ready
- DOCSIS 3.0 Channel Bonding of up to sixteen 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



# **General Specifications**

F-Connector, female 75 $\Omega$
Single One-Gigabit (10/100/1000) Ethernet port
5 (h) x 2.1 (w) x 5 (l) in (127 x 51 x 127 mm)
RoHS compliant, FCC, UL listed (U.S. and Canada),
Industry Canada
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

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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	Power PC or later; OS 10 or higher
Home Networking	Ethernet router or wireless access point connectivity
	via Ethernet port

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



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