

SBG6950AC2

DOCSIS 3.0 Consumer Series Wireless Gateway

FEATURES:

- 16 x 4 DOCSIS Channel Bonding for fast DOCSIS® 3.0 download speeds.
- ARRIS Secure Home Internet Service by McAfee included
 - Also includes a free trial of McAfee LiveSafe client protection
- Supported with ARRIS SURFboard Manager Mobile App for connection and management
- Multiple 4k and HD video streams easily supported
- Multi Processor Technology with a 600 MHz Intel Atom® Core Application Processor
- Internal 32 bit Data architecture for maximum speeds
- 4 port Gigabit Ethernet Router with Wi-Fi®
- Integrated Multi-User MIMO Antennas, 3x3 arrays for both radio bands
- Bandsteering available for optimal radio connections
- Dual Band Concurrent Wi-Fi 2.4 GHz 802.11n and 5 GHz 802.11ac wave 2 High Power Radios with wireless throughput of up to 1,900 Mbps
- USB 2.0 Host Port with support for NAS Drive, Media Server, or other device connection
- WPS for quick client connection



PRODUCT OVERVIEW:

With High Speed Internet service up to 686 Mbps, the ARRIS SURFboard® SBG6950AC2 delivers speeds and performance to meet the new bandwidth services. With broad range, high power Wi-Fi capability; using dual band concurrently operating radios that support the technology of 802.11ac wave two, you have a complete home networking package. This feature-packed unit is intended to serve as the hub of the home or small business network, connecting all IP capable devices (Internet, Data, and Streaming Video) throughout the premises.

Product Highlights

Easy to Setup and Use

- Plug-and-play installation, use the SURFboard Manager App on your mobile device for management (including remote management when you are away from home)
- Wi-Fi® pairing button for easy Wi-Fi Protected Setup™ (WPS) Wi-Fi connection
- Default settings for recommended Security and Quality of Service protection supports standard Internet browser software
- Front panel status LEDs indicate connectivity and simplify troubleshooting, include a management feature to disable them to limit room light saturation.
- User-friendly online or mobile app based diagnostics and configuration

Advanced Services Ready

- DOCSIS 3.0
- Channel bonding of up to sixteen downstream and four upstream channels
- Internet connectivity in the received (downstream) data stream of over 686 Mbps and over 131 Mbps in the send (upstream) data stream
- 108 -1002 MHz Full Capture Bandwidth Tuner
- Supports both IPv4 and IPv6
- Integrated 2.4 GHz 802.11n and 5 GHz 802.11ac Wi-Fi® access point, concurrent radio operation with 802.11ac wave two Multi-User MIMO support
- MIMO antenna arrays offer performance benefits for wireless LAN (WLAN) access points
- Powerful High-gain Wi-Fi® output added for optimized throughput over a greater range
- Four 1 Gb Ethernet ports enable flexible, high-speed connectivity with Auto Negotiate and Auto MDIX
- Support for Multicast IP services
- USB 2.0 Host port with support for multiple file transfer protocols and a file structure that prevents harm to your transferring files from unexpected crashes.

Reliable and Secure

- WPA/WPA2 Wi-Fi® security
- Enhanced security: supports AES traffic encryption

Benefits

- Top of the line Cable Modem Wireless Access Point using 802.11ac wireless technology, supporting 1900 Mbps throughput
- Supported by ARRIS's highly rated Consumer Support Team
- Includes Secure home Internet powered by McAfee with a protected connection for all of your home network.

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

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

i. Broadband cable service is required to use this product. DOCSIS® 3.0 service is required to obtain the channel bonded upload/download rates. Actual rates may vary dependent on a number of factors including, but not limited to: the services offered by your cable service provider, network traffic, computer equipment, type of server, number of connections to server, and availability of Internet router(s). The product is backward compatible with DOCSIS® 2.0. Please contact your cable service provider for their capability to modify, or upgrade, your cable modem. ARRIS cannot guarantee the availability, reliability, or performance of the broadband service used. Cable service providers may offer varying levels of support for this product. ARRIS, the ARRIS Logo and SURFboard are all trademarks or registered trademarks of ARRIS Enterprises LLC. All other trademarks are the property of their respective owners. © 2017 ARRIS Enterprises LLC. All rights reserved. XFINITY and the XFINITY logo are registered trademarks of Comcast Corporation.

SURFboard® SBG6950AC2



Interface Speeds



Wi-Fi	1900Mbps
DOCSIS Downstream	640Mbps
USB2.0	480Mbps
DOCSIS Upstream	120Mbps

Specifications

Physical

Operating Temperature °C	0 to 40
Operating Relative Humidity	5-85% (Non condensing)
Storage Temperature °C	-40 to 70
Dimensions (H x W x D) inches	9.5" x 7.68" x 2.25" - excluding F-connector, including base
Weight lbs.	2.64
Diagnostic LED's (Front)	Power, US/ DS, Online, 2.4GHz, 5GHz, WPS
Diagnostic LED's (Rear)	Ethernet Link/Speed

Interfaces

RF Interface	External 'F' type connector
Data Interfaces (bridged)	4 x 10/100/1000 Base-T Ethernet (RJ-45 connector)
USB Interface	USB 2.0 Powered Host Port
Input Voltage (nominal)	12VDC, 30W

RF Downstream

Bonded Channels	Up to 16
Tuner Configuration	Full capture tuning range
Frequency Range (MHz)	108-1002 DOCSIS
Data Rate (Mbps Max.)	Up to 686
RF Input Sensitivity Level (dBmV)	-15 to +15 (DOCSIS))

RF Upstream

Bonded Channels	Up to 4
Frequency Range (MHz)	5 to 42 MHz
Data Rate (Mbps Max.)	up to 131
RF Output Level (dBmV)	+57 dBmV (64 QAM, single upstream) +54dBmV (64QAM, 4-8 upstreams) +58dBmV (16 QAM, single upstream) +56 dBmV (SCDMA, single upstream)
Modulation	QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM & 128 QAM (S-CDMA only)

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