

SBG6950AC2

DOCSIS 3.0 Consumer Series Wireless Cable Modem

FEATURES:

- 16 x 4 DOCSIS Channel Bonding for fast DOCSIS® 3.0 download speeds.
- Supported with ARRIS SURFboard Manager Mobile App for connection and management
- Multiple 4k and HD video streams easily supported
- Multi Processor Technology with a 1.2GHz Intel Atom Core Application Processor
- DOCSIS® 3.0 and PacketCable™ 2.0 compliant design
- 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
- 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

SURFboard® SBG6950AC2



Interface Speeds

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

SPECIFICATIONS

Physical

Operating Temperature	0 to 50°C
Operating Relative Humidity	5-85% (Non condensing)
Storage Temperature	-40 to 70°C
Dimensions (H x D x W)	9.5" x 2.25" x 7.69
Weight	1.94lbs 0.88kg
Diagnostic LED's (Front)	Power, US/ DS, Online, 2.4GHz, 5GHz, WPS
Diagnostic LED's (Rear)	Ethernet Link/Speed

RF Downstream

Bonded Channels	Up to 16 SC-QAM channels
Tuner Configuration	Full capture tuning range
Frequency Range (MHz)	108MHz - 1002MHz DOCSIS
Data Rate* (Mbps Max.)	Up to 640Mbps
RF Input Sensitivity Level	-15dBmV to +15dBmV (DOCSIS)

RF Upstream

Bonded Channels	Up to 4 SC-QAM channels
Frequency Range	5MHz to 42 MHz
Data Rate* (Mbps Max.)	Up to 120Mbps
RF Output Level	+57 dBmV(64QAM, single upstream) +54 dBmV(64QAM, 4-8 upstream) +58 dBmV(16QAM, single upstream) +56 dBmV(SCDMA, single upstream)

SPECIFICATIONS

Interfaces

RF Interface	1 External 'F' type connector
Date Interfaces (bridged)	4 x 10/100/1000 Base-T Ethernet (RJ-45 connector) MDI /MDI-X
USB 2.0, powered	DLNA, NAS, Printers, Media Servers
Input Voltage (nominal)	12V DC
AC-DC	External

Wireless

Frequency Range	2GHz: 2412MHZ – 2483.5MHZ 5GHz: 5170MHZ – 5250MHz and 5735MHz – 5835MHz
Spatial Streams	2.4GHz:2, combined TX power < 30 dBm 5GHz:3, combined TX power < 30 dBm
Wireless	802.11ac wave 2 AC1900
Antennas	2.4 GHz 2x2 5 GHz 3x3

**Max raw DOCSIS rate; actual throughput is less due to overhead, configuration, and RF conditions. Max Rate may also be limited by service level.*

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

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

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