

## SBG7580-AC

# DOCSIS 3.0 Consumer Series Wireless Gateway

### FEATURES:

- 32x8 DOCSIS Channel Bonding for the best DOCSIS<sup>®</sup> 3.0 download speeds available
- Capable of greater 1Gbps Downstream Throughput for the fastest gaming ever
- Multiple 4k and HD video streams easily supported
- Multi Processor Technology with a 1.2 GHz Intel Atom<sup>®</sup> Core Application Processor
- Internal 32 bit Data architecture for maximum speeds
- 4 port Gigabit Ethernet Router with Wi-Fi<sup>®</sup>
- 3x3 Integrated Dual Band Concurrent 2.4 GHz 802.11n and 5 GHz 802.11ac High Power Radios with wireless throughput of up to 1,750 Mbps
- Optimized internal MIMO antennas to eliminate frustrating alignment requirements and the potential for breakage
- WPS for quick client connection
- USB 2.0 port supporting connected hard drives with SAMBA, and DLNA Media Sharing (it can charge your USB cabled devices as well)
- Internal Power Supply, no more lost or mismatched power bricks



### PRODUCT OVERVIEW:

With High Speed Internet service offerings reaching 1 Gbps and higher, the ARRIS SURFboard<sup>®</sup> SBG7580-AC delivers speeds and performance to meet the new bandwidth services. Adding in the broad range, high power, Wi-Fi capability with dual band radios and the technology of 802.11ac and you have a complete home networking product. 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, Voice and Video) throughout the premises.

## Product Highlights

### Easy to Setup and Use

- Plug-and-play installation
- 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, multicolor LEDs indicate status and simplify troubleshooting, now with a feature to disable to control brightness levels
- User-friendly online diagnostics and configuration

### Advanced Services Ready

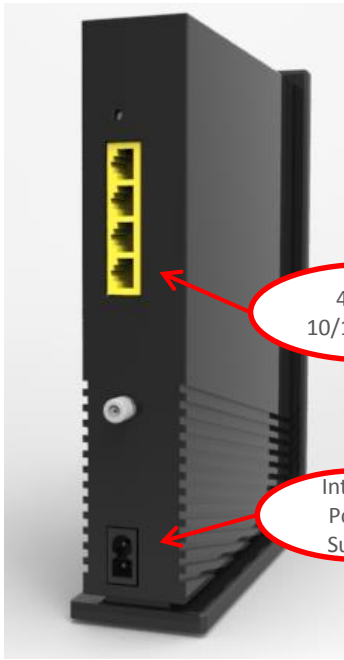
- DOCSIS 3.0
- Channel bonding of up to thirty two downstream and four upstream channels
- Internet connectivity in the received (downstream) data stream of over 1 Gbps and over 240 Mbps in the send (upstream) data stream
- 1 GHz-capable tuner
- Best-in-class RF Immunity, built into SURFboard products since 2006, protects against potential service impacting interference
- Supports both IPv4 and IPv6
- Compatible with SURFboard RipCurrent Gigabit Network Extenders for transporting Internet signals via the AC Power Lines (requires minimum of 2 external adapters)
- Backwards compatible to 802.11a/b/g/n
- Integrated 2.4 GHz 802.11n and 5 GHz 802.11ac Wi-Fi® access point, concurrent radio operation
- 3x3 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
- Support for multiple Guest SSIDs for segregated networks
- MoCA® reject filter ensures care-free interoperation between MoCA and DOCSIS
- Internal power supply eliminates bulky transformers

### Reliable and Secure

- WPA/WPA2 Wi-Fi® security
- Advanced firewall with DoS protection and intrusion prevention
- Enhanced security: supports AES traffic encryption

### Benefits

- Top of the line Cable Modem Wireless Access Point with best in class wireless throughput, reach, range, and robustness
- Supported by ARRIS's highly rated Consumer Support Team



4 ports  
10/100/1000

Internal  
Power  
Supply

### Interface Speeds

Wi-Fi®	1750 Mbps
DOCSIS® Downstream	1280 Mbps
USB 2.0	480 Mbps
DOCSIS® Upstream	240 Mbps

### 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	9.25 x 7.5 x 2.25 (excludes "F" connector)
Weight lbs.	1.4
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)	115/220VAC, 50/60 Hz

#### RF Downstream

Bonded Channels	Up to 32
Tuner Configuration	Full capture tuning range
Frequency Range (MHz)	108-1002 DOCSIS
Data Rate (Mbps Max.)	Up to 1280
RF Input Sensitivity Level (dBmV)	-15 to +15 (DOCSIS))

#### RF Upstream

Bonded Channels	Up to 8
Frequency Range (MHz)	5 to 42 MHz
Data Rate (Mbps Max.)	up to 240
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)

#### Wireless

Frequency Range	2.5GHz and 5GHz
System Transmit Power (2.4GHz)	+32dBm (MCS0), +30dbm (MCS7)
System Transmit Power (5GHz)	+32dBm (MCS0), +30dbm (MCS9)
Spatial Streams	3
Receive Levels	2.4GHz - <-90dBm 802.11n (MCS0) , <-69dBm 802.11n (MCS7), HT20 5.0GHz - <-90dBm 802.11ac (MCS0) , <-60dBm 802.11ac (MCS9), VHT80
Antennas (per band)	3 combined transmit and receive

For information on additional SURFboard products please visit [www.SURFboard.com](http://www.SURFboard.com)

For product support please visit [www.arris.com/consumers](http://www.arris.com/consumers)

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