



## SMCD3GN-RES

DOCSIS 3.0 Draft-N Wireless Residential Cable Modem Gateway

### OVERVIEW

The SMCD3GN-RES is a powerful DOCSIS 3.0 gateway providing 802.11n wireless connectivity to high-speed "Wideband" Internet services. Taking advantage of DOCSIS 3.0 technology, the gateway operates on up to four downstream and/or upstream bonded channels supporting speeds of up to 160Mbps downstream and 120Mbps upstream. In addition, the SMCD3GN-RES offers numerous remote management options, provisioning via GUI, CLI or downloadable configuration file, advanced troubleshooting capabilities, Stateful Packet Inspection (SPI) firewall, PPTP, L2TP, and IPSec VPN passthrough, Universal Plug and Play (UPnP), and DOCSIS Quality of Service (QoS).

### KEY FEATURES

#### Functions

- 802.11n WiFi radio featuring 3 internal antennas
- Four Gigabit Ethernet ports ensures maximum speed is delivered to the customer's CPE
- Compatible with DOCSIS 1.0, 1.1, 2.0, 3.0 cable infrastructure
- IPV4 and IPV6 capable

#### Advanced Features

- Full featured Command Line Interface (CLI) supports detailed troubleshooting
- Advanced SPI firewall
- Port triggering, port filtering, and special application handling

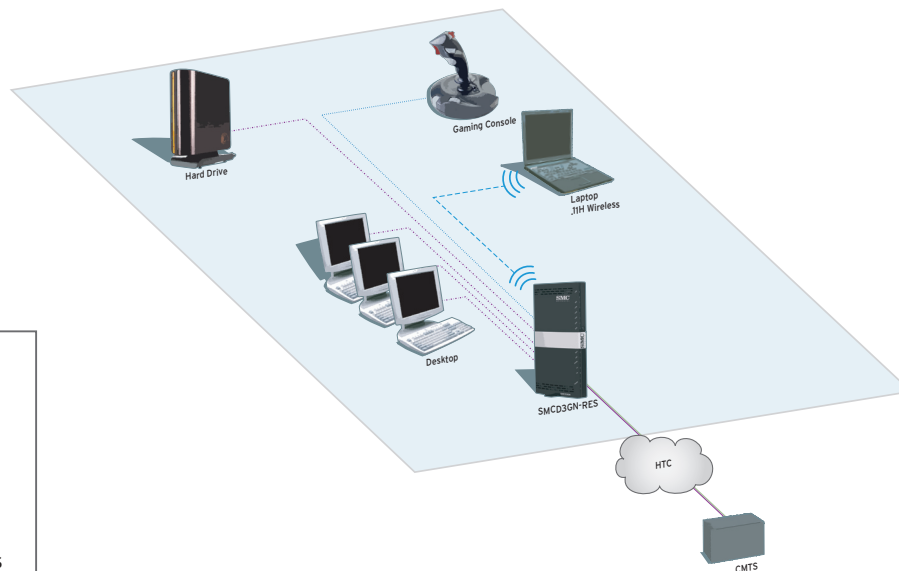
#### Easy Installation

- Wi-Fi Protected Setup (WPS) for easy and secure configuration of a wireless network
- Downloadable configuration file simplifies installation process
- GUI displays helpful troubleshooting information
- Comprehensive LED display for easy installation and monitoring

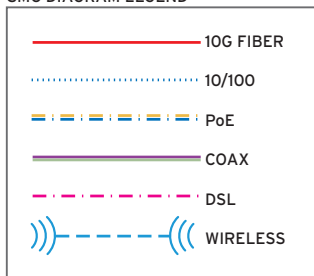
#### System Management

- TELNET, SSH
- TFTP
- System Logging
- SNMP v1/2c/3

### APPLICATION DIAGRAM



#### SMC DIAGRAM LEGEND



## TECH SPECS - SMCD3GN-RES

### COMPATIBILITY

- Platform independent - works with PC, OS, Linux, MAC, UNIX
- DOCSIS 1.0/1.1/2.0/3.0 compliant
- IEEE 802.3, 802.3u
- SPI Firewall meet ICASA Guidelines

### NETWORK INTERFACE

- 10/100/1000 Base-T Ethernet
- USB 2.0 Host port
- Wireless .11N MIMO

### PORTS

- 4 ports 10/100/1000 MDI/MDIX auto sensing switch
- 1 IEEE 802.11n wireless interface
- TR-68 coloring for 1 USB 2.0 Connector Type B
- TR-68 coloring for 4 Ethernet port
- Cable Interface F type female 75ohm

### CHANNEL BONDING

- Downstream: Up to 4 channels
- Upstream: Up to 4 channels

### SOFTWARE FEATURES

- GUI display common troubleshooting information, modem status, and feature setup
- Full features CLI provides enhanced troubleshooting and setup
- DHCP server
- Ipv6 support coexist Ipv4
- Downloadable configuration files allow for easy setup and installation.
- Universal Plug and Play (UPnP) enabling any UPnP devices seamlessly
- Quality of Services (QoS) ensure high quality performance
- SAMBA for USB Host port connection of USB hard drives\*
- GUI/SNMP/CLI addition to present PHY usage (multiple channels parameters)
- Port Forwarding
- 64/256QAM auto detection
- Independent resets for downstream and upstream blocks
- Fragmentation and concatenation enabling Quality of Server (QoS) features
- Supports 64/128/256 bit RC4 authentication and encryption

### NETWORK PROTOCOL

- IEEE 802.1d compliant bridging
- DHCP Client/Server
- UDP
- DNS Relay
- ToD Client
- ARP
- ICMP
- FTP/TFTP
- Telnet

### SECURITY

- Password protected configuration access with multiple levels
- Stateful Packet Inspection (SPI) Firewall
- Network Address Translation (NAT)
- Application Level Gateways (ALG)
- Intrusion Detection
- Denial of Service (DoS) prevention
- Trojan Horse Prevention
- Smart Tracking
- Domain Validation
- Multiple User Profiles
- Dynamic Address-User Mapping
- Web based authentication
- Comprehensive Logging
- VPN Passthrough (IPSec, PPTP, L2TP)
- Content and Filtering Features
- DMZ

### RECEIVER

- Demodulation: 64/256QAM
- Max speed: 38Mbps (64QAM) / 43Mbps (256QAM) per channel
- DOCSIS 5120kbps/10Mbps (QPSK/16QAM)
- DOCSIS 41.4 Mbps (64QAM)/55.2Mbps (256QAM) bounding (DOCSIS) per channel
- +222.48(+200) Mbps with 4 DS channel bounding (EuroDOCSIS)
- Frequency range 91 to 857 MHz +30 kHz (Center)
- DOCSIS 108 to 862 MHz +30 kHz (Edge)
- EuroDOCSIS 93 to 767 MHz +30 kHz (Center) DOCSIS-J
- 50 MHz to 1002 MHz (DOCSIS)

### SIGNAL LEVEL

- -15dBmV to +15dBmV (Automatically Gain Controlled by CM)
- 17 dBmV

### TRANSMITTER

- Modulation:
  - TDMA, QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM
  - S-CDMA QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM
- Max Speed 320, 640, 1280, 2560, 5120kbps
  - (QPSK), 640, 1280, 2560, 5120, 10240kbps (16QAM)
  - +122.88(+108) Mbps with 4 US channel bounding (DOCSIS/EuroDOCSIS)
- Frequency Range
  - 5 to 42MHz (edge to edge) DOCSIS
  - 5 to 65MHz (edge to edge)
- EuroDOCSIS/Dual
  - 5 to 55MHz (edge to edge) DOCSIS-J
  - 5 to 42 MHz edge to edge, or
  - 5 to 85 MHz edge to edge (DOCSIS)
  - (Optional upstream frequency range 5-85 MHz ; Extended Upstream Frequency Range)

### REGULATORY CERTIFICATION

- FCC Part 15B Class B
- UL/cUL

### DIMENSION ( L x W x H )

- 10.6 x 6.1 x 1.4 in / 26.8 x 15.5 x 3.5 cm

### LEDs

- Power, DS( Downstream), US( Upstream), Online, Link, Diag, LAN (4), WiFi, WPS, USB

### POWER

- 12VDC 2A

## CONTACT

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