



SMCD3GN-RES

Maximum Wideband Speeds
Enables Cable Operators to Grow their Residential Business

The Opportunity: The Fastest Wideband

Residential customers are demanding faster Internet services as their requirements for bandwidth increase. Deployment of DOCSIS 3.0 gateways enable Cable Operators to offer the fastest Internet services to their current and prospective residential customers.

Cable operators have established a profitable position in the residential market by offering consumers wideband Internet services over DOCSIS. DOCSIS 3.0 provides a unique opportunity for operators to increase the speed of their data service offerings to address this large yet growing and highly profitable market segment.



The Solution: SMCD3GN2-RES

The **SMCD3GN-RES** is the solution that you've been looking for. The SMC D3GN-RES is a leading DOCSIS 3.0 gateway that allows Cable Operators to aggressively grow their residential customer base.

SMC is a specialist in high-quality, reliable CPE products to MSO's. The SMCD3GN-RES is designed to provide:

- Superior Performance
- Maximum Ease of Deployment + Ease of Use
- Requires Minimal Support

We have over 4 Million SMC CPE gateways, routers, and modems currently in service in North America. The launch of the SMCD3GN-RES will continue our nearly 40 year history of delivering excellence for our customers.



SMCD3GN-RES Specification Overview

The **SMCD3GN-RES** is a powerful and flexible DOCSIS 3.0 gateway providing high-speed wideband Internet access for residential customers.

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,

This powerful and flexible platform provides the ideal solution for Cable Operators to aggressively grow their residential customer base.



SMCD3GN-RES Key Features:

Functions

- 802.11n WiFi radio featuring 3 internal antennas
- Compatibility with DOCSIS 1.1, 1.0, 2.0, 3.0
- IPV4 and IPV6 capable
- 4 Gigabit Ethernet Ports ensures maximum speed is delivered to CPE

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

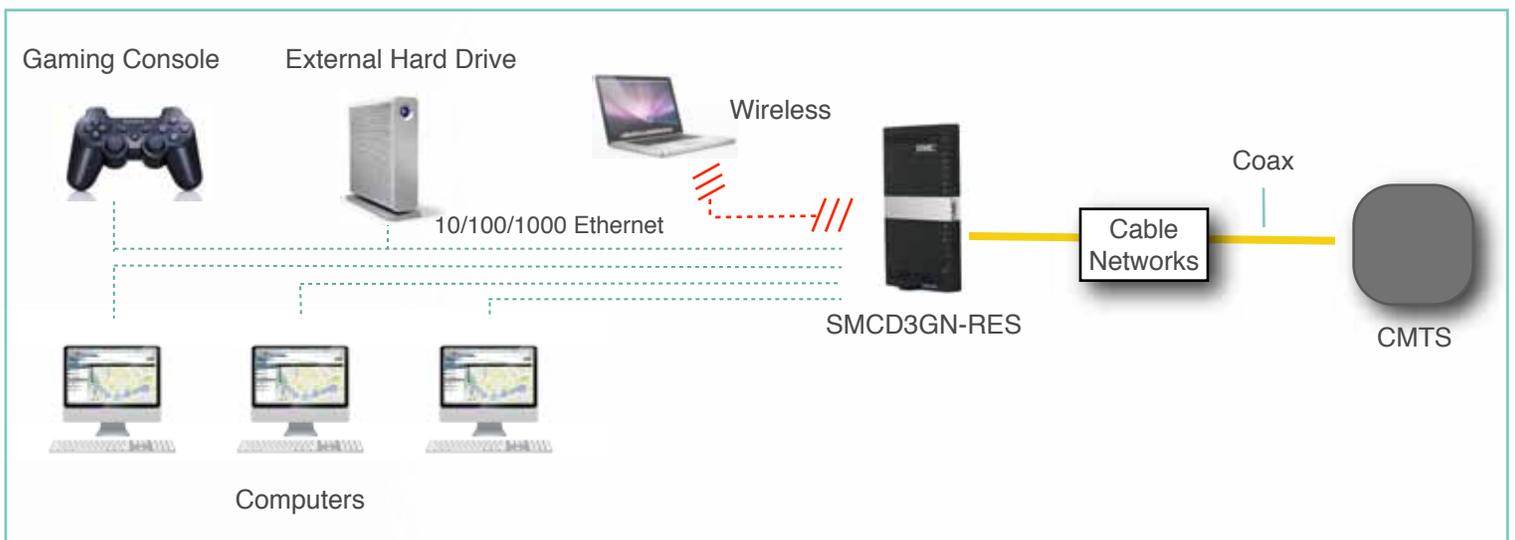
Advanced Business Class Features

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

System Management

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

Application Overview



Tech Specs: SMCD3GN-RES



COMPATIBILITY

- ☛ Platform independent – works with PC, Mac, Linux, UNIX
- ☛ DOCSIS 1.0/1.1/2.0/3.0 • IEEE 802.3, 802.3u
- ☛ SPI Firewall meets ICSA guidelines
- ☛ USB 2.0 Host Port

NETWORK INTERFACE

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

PORTS

- ☛ 4 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 Ports
- ☛ Cable Interface F type female 75ohm

CHANNEL BONDING

- ☛ Downstream: Up to 4 Channels
- ☛ Upstream: Up to 4 Channels

NETWORK PROTOCOL

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

SIZE: (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, USB

POWER SUPPLY

- ☛ Internal Power Supply

SIGNAL LEVEL

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

REGULATORY CERTIFICATION

- ☛ FCC Part 15 Class B
- ☛ UL/cul

SECURITY

- ☛ Password protected configuration access
- ☛ 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 Termination (IPSec, PPTP, L2TP, IKE)
- ☛ Content and Filtering Features
- ☛ DMZ

RECEIVER

- ☛ Demodulation: 64QAM, 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)
- ☛ Input Frequency range 88 MHz to 1002 MHz

TRANSMITTER

- ☛ Modulation:
 - ☛ TDMA,QPSK, 8QAM, 16QAM, 32QAM, 64QAM,128 QAM
 - ☛ S-CDMA QPSK, 8QAM, 16QAM, 32QAM, 64QAM,128QAM
- ☛ Max Speed 320, 640, 1280, 2560, 5120kbps
 - ☛ (QPSK),640, 1280, 2560, 5120, 10240kbps (160QAM)
 - ☛ +122.88(+108) Mbps with 4 US channel bounding (DOCSIS/EuroDOCSIS)
- Frequency Range: 5 to 42MHz (edge to edge) DOCSIS

SOFTWARE FEATURES

- ☛ DOCSIS 3.0 certified
- ☛ Full features CLI provides enhanced troubleshooting and setup
- ☛ GUI display common troubleshooting information, modem status, and feature setup
- ☛ DHCP Server
- ☛ 64/256QAM auto detection
- ☛ IPV6 support coexist IPV4
- ☛ Downloadable Gateway configuration files allow for easy setup and installation
- ☛ Universal Plug and Play (uPnP) enabling any uPnP devices seamlessly
- ☛ Quality of Service (QoS) ensures high quality performance
- ☛ SAMBA for USB Host port connection of USB hard drives
- ☛ GUI/SNMP/CLI addition to present PHY usage (multiple channels parameters)
- ☛ 4 SSIDs support with full wireless capabilities for each SSID (SSID broadcast on/off, independent encryption settings, VLAN)
- ☛ 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
- ☛ Port Forwarding
- ☛ MIB object that executes any CLI command
- ☛ WAN/LAN transparent bridging

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