SMCD3GN2-BIZ

Maximum Wideband Speeds
Enables Cable Operators to Grow their SMB Business

The Opportunity: Grow Your SMB Base

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

Most cable operators have established a profitable position in the segment by offering small businesses ISP services over DOCSIS. DOCSIS 3.0 provides a unique opportunity for operators to expand their data service offerings to address this large yet growing and highly profitable market segment.

The Solution: SMCD3GN2-BIZ

The SMCD3GN2-BIZ is the solution that you've been looking for. The SMCD3GN2-BIZ is a leading DOCSIS 3.0 gateway that allows Cable Operators to aggressively grow their SMB customer base.

SMC is a specialist in high-quality, reliable CPE products to MSO's. The SMCD3GN2-BIZ is designed to provide:

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

We have over 3 Million SMC CPE gateways, routers, and modems currently in service in North America. The launch of the SMCD3GN2-BIZ will continue our nearly 40 year history of delivering excellence for our customers.

SMCD3GN2-BIZ Specification Overview

The SMCD3GN2-BIZ is a powerful and flexible DOCSIS 3.0 gateway providing high-speed Internet access for commercial services including teleworker, hospitality and other SMB applications

Taking advantage of DOCSIS 3.0 technology, the gateway operates on up to eight downstream and four upstream bonded channels supporting speeds of up to 320Mbps downstream and 120Mbps upstream.

The SMCD3GN2-BIZ supports up to six blocks of Static IP assignment in conjunction with RIP v1/v2, numerous remote management and provisioning options, and advanced troubleshooting capabilities.

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

SMCD3GN2-BIZ Key Features:

Functions
- Fully interoperable with all DOCSIS Cable Networks
- Compatibility with DOCSIS 1.1, 1.0, 2.0, 3.0
- IPV4 and IPV6 capable
- Gigabit Ethernet Port ensures maximum speed is delivered to CPE

Easy Installation
- Downloadable configuration files allow for easy quick installation
- Web based GUI allows for setup of all features, Comprehensive LED display for easy installation and monitoring
- CLI enables advanced troubleshooting
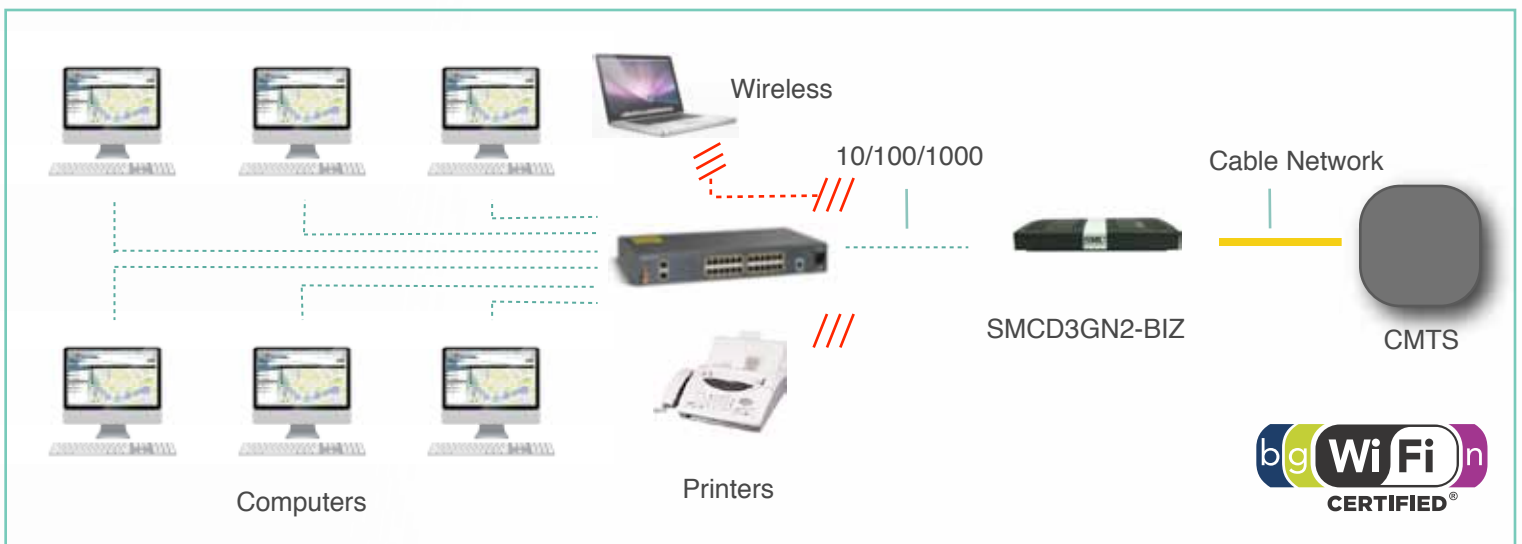- Comprehensive LED display for easy installation and monitoring

Advanced Business Class Features
- RIPv1/v2 enables static IP addressing
- Built-in DHCP server allows for dynamic assignment of the static IP block
- Full featured Command Line Interface (CLI)
- Advanced SPI Firewall, VPN Termination

System Management
- TELNET, TFTP
- TACACS + and Radius Management authentication for enhanced security
- SNMP v1/2/3

Application Overview

![SMC Networks logo]

Tech Specs: SMCD3GN2-BIZ

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
- 1 USB 2.0 Host Port

NETWORK INTERFACE
- 4 10/100/1000 MDI/MDIX auto sensing switch
- TR-68 coloring for 1 USB 2.0 connector Type B
- TR-68 coloring for 4 Ethernet Ports
- Cable Interface F type female 75ohm

WLAN
- 1T1R/1T2R/2T2R modes
- 300Mbps PHY data rate
- Supports IRRR 802.e WiFi Multimedia (WMM)
- Support 8 SSIDs
- WMM-QoS
- WPS, WPA, WEP (64/128-bit), TKIP,AES, MAC Filtering
- WPS push button for WiFi Protected Setup with PIN
- MAC address Access Control

CHANNEL BONDING
- Downstream: Up to 8 Channels
- Upstream: Up to 4 Channels
- Enable 8x4 with Single WB tuner and Quad QAM in 2x48 MHz Capture Bandwidth
- Enable 8x4 with 4 MPEG Tuners

NETWORK PROTOCOL
- Application Layer: DHCP Client/Server; DNS (Proxy & Dynamic), HTTP, FTP, TFTP; SNMPv1/2/3, Telnet
- Transport Layer: TCP/UDP
- Network Layer: ARP, ICMP, IPv4, IPv6, IPSec
- Data Link Layer: 802.1d transparent bridging, VPN Pass-through, PAT, VLAN, Static Routing; ARP; QoS
- Physical Layer: Ethernet 10/100/1000Base T

SIZE: (L x W x H)
- 9.84x 6.30 x 1.65 in
- 25 x 16 x 4.2 cm

POWER
- AC on board, AC power: 90~120V

ENVIRONMENT
- Operating Temperature: 32 °F (0°C) to 104°F (40°C)
- Operating Humidity: 10% to 90%
- Storage Temperature: -40°F (-40°C) to 140°F (80°C)

LEDs
- Power, DS (Downstream), US (Upstream), Online, Link, ETH, Diag, Wireless, USB

SECURITY
- Password protected configuration access
- Stateful Packet Inspection (SPI)
- Network Address Translation (NAT)
-     Many-to-one NAT, Many-to-many NAT
- Application Level Gateways (ALG)
- Intrusion Detection
- Denial of Service (DoS) prevention
- Trojan Horse Prevention
- Smart Tracking
- Domain & URL Filtering
- Multiple User Profiles
- Dynamic Address-User Mapping
- Web based authentication
- Comprehensive Logging
- VPN Termination Pass-Through (IPSec, PPTP, L2TP, IKE)
- DMZ

RECEIVER
- Demodulation: 64/256QAM
- Bandwidth: 6MHz
- Max. Data Rate per Channel: 30Mbps (64QAM), 43Mbps(256QAM)
- Frequency Range: 88~1002MHz
- Signal Level: -15dbmV to + 15dbmV
- Input Impedance: 75Ω
- Input Return Loss: >6 dB over 88MHz – 1002 MHz

TRANSMITTER
Modulation:
- TDMA:QPSK, 8,16,32,64QAM,
- S-CDMA: QPSK, 8,16,32,64,128QAM

Bandwidth:
- TDMA:200, 400, 800, 1600, 3200,6400kHz
- S-CDMA: 1600, 3200, 6400kHz

Max. Data Rate per Channel:
- 320,640,1280,5120,10240kbps (QPSK)
- 480, 960,1920,3840,7680,15360kbps (8QAM)
- 640, 1280, 2560,5120,10240,20480kbps (16QAM)
- 800,1600,3200,6400,12800,25600kbps (32QAM)
- 960, 1920, 3840, 7680,15360,30720kpbs (64QAM)
- 8960,17920,35840kbps (128QAM)

- Frequency Range: 5MHz- 42MHz
- Output Signal Level:
  - TDMA: +8 to +54dBmV (32QAM, 64QAM); +8 to +55dBmV (8QAM, 16QAM);+8 to +58dBmV (QPSK)
  - S-CDMA: +8 to +53dBmV(all modulation)
- Output Return Loss: > 6dB

SOFTWARE FEATURES
- Full features CLI provides enhanced troubleshooting and setup
- DHCP client/server
- IPV6 support coexist IPV4
- RIPv1/2 support
- Downloadable configuration files allow for easy setup and installation.
- Universal Plug and Play (UPnP) enabling any UPnP devices seamlessly
- SAMBA for USB Host port connection of USB hard drives
- MIB object that executes any CLI command
- GUI/SNMP/CLI addition to present PHY usage (multiple channels parameters)
- VLAN Tagging (Qin Q; 802.1p/q)
- 8 SSIDs support with full wireless capabilities for each SSID
- Port Forwarding
- 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
- WAN-LAN transparent bridging
- SOAP. HTTP and HNAP
- XML Configuration

WEIGHT: 508g/1.12lb

REGULATORY CERTIFICATION
- FCC Part 15 Class B
- UL/cul: 609650-1
- WiFi 802.11n Certified
- DOCSIS 3.0 Certified

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