

## DOCSIS 3.0 Wireless Gateway

SMC Networks is a global provider of Customer Premises Equipment (CPE) to Service Providers. SMC specializes in designing, engineering, and delivering the most innovative wireless and wired products to enable cable, telecommunication and multi-service operators around the world to connect their customers to a completely integrated digital home.

SMC's Veloxite™ family of gateways includes a complete array of downstream/upstream channel and Wi-Fi configurations, as well as optional voice, battery backup and MoCA® support capabilities.

The Veloxite™ D3G0804W is a DOCSIS 3.0, 8x4, Wi-Fi data gateway. It hosts a wireless daughter card, for flexibility in Wi-Fi configuration, from Dual Band Dual Concurrent 3x3 Wi-Fi, to Single Band 2.4GHz 3x3 or 2x2, as well as the latest in 802.11ac development.



## Key Features

- **DOCSIS 3.0 Cable Modem**  
Equipped with a 8x4 DOCSIS 3.0 Cable Modem capable of speeds up to in excess of 320 Mbps downstream and 120 Mbps upstream.
- **High-Speed Wireless Interface**  
Offers dual band, dual concurrent Wi-Fi with Wi-Fi connections of up to 450 Mbps, and advanced wireless configuration enabling simultaneous and seamless transmission of real time HD video (using 5 GHz band) and data (using 2.4 GHz band) all over the home.
- **IPV6 Enabled**  
Supports IPv4/IPv6 Dual Stack and IPv6 Rapid Deployment (RD).
- **Quality of Service (QoS)**  
Allows Service Providers to freely manage policies to ensure smooth delivery of mission-critical services including IPTV.
- **TR-069 Remote Management**  
Allows Service Providers to manage and configure CPEs remotely to reduce deployments, configuration support times, and OPEX.

## Application Overview



**Diagram Legend**

10/100/1000

Wireless

Coax



### Technical Specifications

#### HARDWARE FEATURES

- F type RF connector for cable network interface
- Four RJ-45, 10/100/1000Base-TMDI/MDIX auto sensing switch Ethernet ports
- One USB 2.0 Type A Connector, Host Port

#### LEDS AND BUTTONS

- Front LEDs: POWER, DS, US, ONLINE, LINK, 2.4G, 5G, WPS
- Rear LEDs: Integrated LED per each LAN port
- Front Buttons: WPS, ON/OFF
- Rear Buttons: Reset Switch

#### DIMENSIONS (L x W x H)

- 198.5 x 177.5 x 62-47 mm

#### WEIGHT

- 550g

#### POWER

- External power supply
- Power Consumption: 24W
- Input: 100~240 VAC

#### OPERATING ENVIRONMENT

- Operating Temperature: 0° to 40°C
- Storage Temperature: -20° to 70°C
- Operating Humidity: 10 to 90% non-condensing (RH)

#### REGULATORY / STANDARD COMPLIANCE

- DOCSIS 3.0
- IEEE 802.11n
- UL/cUL
- FCC Part 15 Class B, C
- RoHS

#### CHANNEL BONDING

- Downstream: up to 8 channels
- Upstream: up to 4 channels

#### DOWNSTREAM

- Modulation: 64/256 QAM
- Max. Data Rate: 30.34 Mbps (64 QAM) / 42.88 Mbps (256 QAM) per 6 MHz channel
- Frequency Range: 88 MHz to 1002 MHz
- Output Return Loss: -6 dB
- Input Signal Level: -15 dBmV to +15 dBmV

#### UPSTREAM

- Modulation:
  - TDMA: QPSK, 8, 16, 32, 64 QAM
  - S-CDMA: QPSK, 8, 16, 32, 64, 128 QAM
- Frequency Range: 5 MHz to 42 MHz (edge to edge) for N.A. DOCSIS
- Bandwidth:
  - TDMA: 1600, 3200, 6400 kHz
  - S-CDMA: 1600, 3200, 6400 kHz
- Channel Bandwidth
  - TDMA: 200, 400, 800, 1600, 3200, 6400 kHz
  - S-CDMA: 1600, 3200, 6400 kHz
- Signal Level: DOCSIS 3.0 compliant, capable of Extended Transmit Power (TLV5.40)

#### WIRELESS

- 802.11n, 3x3, DBDC (2.4GHz and 5GHz)
  - Max. output level equal or greater than 24 dBm conducted power. Optional 2.4GHz single band Wi-Fi
- 6 internal antennas (3x3 DBDC)
- IEEE 802.e Wi-Fi Multimedia (WMM-QoS)
- Supports up to 16 SSIDs
- WEP (64/128-bit), WPA, WPA2-PSK, WPA2-AES
- Admission control by client MAC address
- WPS Push Button and Passphrase

#### SOFTWARE FEATURES

- Full MIB support for device configuration
- TR-069 and TR-181i2
- Full-featured, secure CLI
- Downloadable configuration files per DOCSIS specification
- Granular per module debug level with multiple diagnose reporting methods
- Multiple language support
- DHCP Client/Server
- IPv4/IPv6 dual stack
- RIPV1/v2
- Universal Plug and Play (UPnP)
- Port forwarding/Port triggering
- Parental control
- Configurable router or bridge mode
- Network Address Translation (NAT)
  - Many-to-one NAT and Many-to-many NAT
- Application Level Gateways (ALG)

#### SECURITY

- Firewall: Stateful Packet Inspection (SPI)
- Password of the Day
- Password protected configuration access and separated MSO/end user configuration files
- Intrusion detection
- Denial of Service (DoS) prevention
- Web-based authentication
- Comprehensive logging
- VPN Termination & Pass-Through (IPSec, PPTP, L2TP, IKE, GRE)
- DMZ

### Contact

Model	Market	Description
D3G0804W-033-NA	North America	DOCSIS 3.0, 8x4, Data Gateway, 3x3 DBDC Wi-Fi
D3G0804W-020-LA	Latin America	DOCSIS 3.0, 8x4, Data Gateway, 2x2 Single-Band 2.4G Wi-Fi