

# TG1682G/CX

## Wireless Gateway

### FEATURES:

- 24x8 Channel Bonding
- Full Capture Bandwidth Tuner
- Multi Processor Technology with a 1.2GHz Intel Atom Core Application Processor
- DOCSIS® 3.0 and PacketCable™ 2.0 compliant design
- 4 port Gigabit Ethernet Wireless Router
- 3x3 Integrated Dual Band Concurrent 2.4GHz 802.11n and 5GHz 802.11ac High Power Radios
- MoCA 2.0 for in Home Video and Data distribution over Coax
- USB 2.0 Host Port
- Two FXS lines of carrier-grade VoIP with HD voice support
- Internal Power Supply for Highest Reliability
- Battery backup



### PRODUCT OVERVIEW:

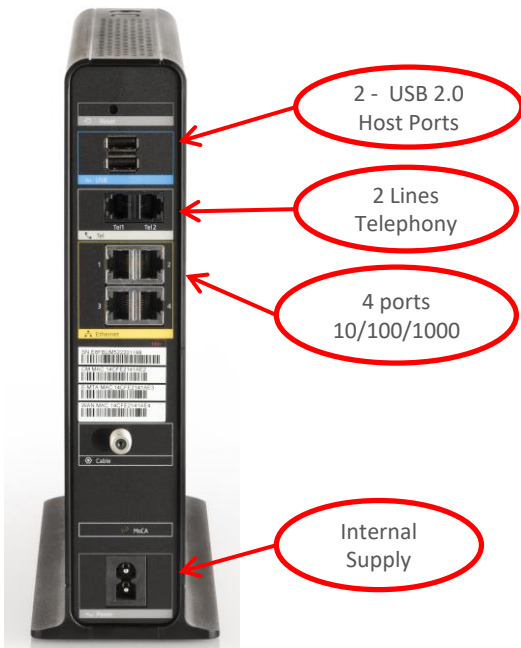
Operators are wanting to push the limits on DOCSIS 3.0 performance and the user experience delivered to the customer. The TG1682G with its superior 802.11ac Dual Band Wireless radios, USB, and MoCA 2.0 interfaces can deliver this performance while also offering improvements in home coverage above that of other models. This feature-packed unit is intended to serve as the hub of the subscribers network, connecting all IP capable devices (Internet, Data, Voice and Video) throughout the customers premises.

Residential gateway support has always been a concern of the operator. The TG1682G distinguishes itself with capabilities to minimize these support needs. Multiple provisioning methods (SNMP, Configuration File, Remote WebGUI access, TFTP, and TR-069/181) allow custom designed setups to be applied to monitor the end user more efficiently. Multiple remote access levels (User, Cusadmin, and MSO) also allow more ease and flexibility for manual configuration and control.

The TG1682G will help lead the future to advanced home and small office services.

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**TG1682G**  
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**Interface Speeds**

WiFi	1750Mbps
DOCSIS Downstream	960Mbps
MoCA 2.0	700Mbps
USB 2.0	480Mbps
DOCSIS Upstream	240Mbps

**Specifications**

**Physical**

Operating Temperature °C	0 to 50
Operating Relative Humidity	5-85% (Non condensing)
Storage Temperature °C	-40 to 70
Dimensions (H x W x D) in.	10.1 x 10.3 x 3.25
Backup Capacity (not supplied)	4 cell 2.2AH Lithium-ion for 8 hours operation. (#718005 Battery Pack)
Weight lbs	2.5 (With Battery included)
Battery Storage Temperature °C	-20 to 60 Note: Storage above 77°F (25°C) will significantly reduce life of the battery and is not recommended.
Diagnostic LED's (Front)	Power, US/DS, Online, 2.4GHz, 5GHz, Tel1, Tel2, Battery, MoCA
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)
Analog Telephony Interface	2 lines; RJ-11
USB Interface	USB 2.0 Powered Host Ports
MoCA	MoCA2.0
Input Voltage (nominal)	115VAC, 50/60 Hz

**Telephony**

Supervisory Voltage	48 Vdc nominal
Ringing Load Capacity	10 REN total; 5 per line
Provisionable High Loop Current Mode	Yes (40mA constant current source)

**RF Downstream**

Bonded Channels	Up to 24
Tuner Configuration	Full capture tuning range
Frequency Range (MHz)	108-1002 DOCSIS
Data Rate (Mbps Max.)	Up to 960
RF Input Sensitivity Level (dBmV)	-15 to +15 (DOCSIS))

**RF Upstream**

Bonded Channels	Up to 8
Frequency Range (MHz)	5 to 42 or 5 to 85 depending on model
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
Transmit Power (from any antenna)	+27dBm (MCS7) +26 dBm (MCS9)
Spatial Streams	3
Receive Levels	2.4GHz - <-88dBm 802.11n (MCS0) <-71dBm 802.11n (MCS7), HT20 5.0GHz - <-84dBm 802.11ac (MCS0) <-57dBm 802.11ac (MCS9), VHT80
Antennas	3 transmit, and 3 receive (per band)

**MoCA**

Frequency Range (MHz)	1150 – 1500
Network Channel Bandwidth (MHz)	50
Max Transmit Power (dBm)	+ 9 max (adjustable)
Transmit Power Shipped (dBm)	0
Max Phy Rate (Mbps)	700
Application Data Rate (Mbps)	400+ bidirectional combined

**Ordering Information**

Model	Description
1000556	TG1682G/CX-0, 42MHz Upstream, No Battery