ARRIS®

Touchstone® TG6442 Cable Voice Gateway

DOCSIS® 3.1 Gateway with Wi-Fi 6

FEATURES

- 2x2 OFDM and OFDMA DOCSIS® 3.1 channels
- 32x8 SCQAM DOCSIS ® 3.0 channels
- Full Capture Bandwidth Tuner
- Switchable diplexer 5-85 MHz or 5-204 MHz
- 4 port Gigabit Ethernet Router
- 4x4 2.4GHz 802.11ax
- 4x4 5GHz 802.11ax
- 2 FXS Ports of carrier grade VoIP with HD voice
- Support USB 3.0 Host Port
- Multi Processor Technology for enhanced application support
- Advanced Firmware support for IPV6, DS-Lite, and SoftGRE
- RDK-B Based

Wi Fi 6 CERTIFIED

PRODUCT OVERVIEW

The TG6442 Cable Voice Gateway supporting DOCSIS 3.1 allows multi-gigabit data rates to be delivered to cable service provider's home and small business customers. The TG6442 with its Wi-Fi 6 Dual-band radios, offers superior Wi-Fi performance enabling reliable Ultra HD video over Wi-Fi.

An upstream frequency range up to 204MHz for increased upstream capacity to support video conferencing and other symmetrical bandwidth applications with a switchable diplexer for ease of deployment on DOCSIS 3.1 networks.

High-capacity DRAM, Flash and Multiple embedded processor cores are designed to allow new applications to be deployed on the gateway. This feature-packed unit is intended to serve as the hub of the subscriber's network, connecting all IP capable devices(Internet, Data, Voice and Video) throughout the customers premises.

To minimize support OPEX costs the TG6442 provides features for remote management and diagnostics. 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 and MSO) also allow more ease and flexibility for manual configuration and control.

Touchstone® TG6442 Cable Voice Gateway

SPECIFICATIONS

Physical

Operating Temperature	0 to 40°C
Operating Relative Humidity	5-95% (non-condensing)
Storage Temperature	-40 to 70°C
Dimensions (H x W x D)	246 mm x 199 mm x 64 mm (excludes 'F' connector)
Weight	0.825kg
Diagnostic LEDs (Front)	PHONE, INTERNET, WPS, WIFI, POWER
Diagnostic LEDs (Rear)	Ethernet Link/Speed
Front Switches	WPS

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 3.0 Powered Host Port
Input Voltage (nominal)	12V DC
Input Current (max)	3.5A

RF Downstream

Bonded Channels	Up to 32 SCQAM and/or 2 OFDM
Tuner Configuration	Full capture tuning range
Frequency Range	108-254MHz-1218MHz DOCSIS
Data Rate	Up to 5 Gbps
RF Input Sensitivity Level	-15 dBmV to +15 dBmV (DOCSIS)

RF Upstream

Bonded Channels	Up to 8 SCQAM and/or 2 OFDMA
Frequency Range	5MHz to 85MHz or 5MHZ to 204MHz
Data Rate	Up to 1 Gbps
RF Output Level	+65 dBmV(64QAM, single US) +57 dBmV(64QAM, 4-8 US) +65 dBmV(16QAM, single US) +65 dBmV(OFDMA)

SPECIFICATIONS

Voice

Standards Supported	PacketCable™ NCS (1.5/2.0) Network-based call signaling protocol (PKT-SP-EC-MGCP) RFC 3261 SIP RFC 2805 MGCP
Codecs Supported	G.711, G.722, G.729ab
FAX	T.38, G.711 Fax Passthrough
REN Capability	5 REN Total
Voice supplementary services	Call Waiting Call Hold 3PTY Call Caller ID Voice Activity Detection (VAD) Comfort Noise Generation (CNG) Echo cancellation: G.165 G.168 up to 16 ms
DTMF tone relay	RFC 2833
Pulse dialing	DTMF/pulse tones Pulse/DTMF tones conversion
RTP layer	RFC 1889 RFC 1890
Line Card Support	Flexible LC Templates

Wireless

Frequency Range	2.4GHz and 5GHz
Transmit Power EIRP	+ 31.5dBm (MCS0, 2.4GHz, HT20) + 30.5dBm (MCS7, 2.4GHz, VE20) + 32.5dBm (MCS0, 5GHz, VHT20) + 29.5dBm (MCS9, 5GHz, VE80) + 28.0dBm (MCS11, 5GHz, VE160)
Spatial Streams	4 for 2.4GHz, 4 for 5GHz
Receive Levels	-94dBm 802.11ax (MCS0, 2.4GHz, VE20) -93dBm 802.11ax (MCS0, 5GHz, VE20)

SPECIFICATIONS

Network & Services

Network Protocols	Dual stack IP (IPv4, IPv6)
	TCP, UDP
	ARP, ICMP, DHCP
	TFTP, SNMP, HTTP(s), Telnet
Parental Control	URL-based website filtering
	Time-based access control
Routing modes	Transparent bridging
	Routed modes
Network Protocols	Dual stack IP (IPv4, IPv6)
	TCP, UDP
	ARP, ICMP, DHCP
	TFTP, SNMP, HTTP(s), Telnet
Wireless QoS	WMM (BE, BK, VI, VO access categories) queuing and scheduling

SPECIFICATIONS

Management

SNMP	SNMP v1, SNMP v2, SNMP v3
Web-based user interface management and administration	User-friendly GUI via HTTP Command Line Interface (CLI)
CPE WAN Management Protocol (CWMP)	TR-069 TR-181

Security

Docsissecurity	BaselinePrivacyInterface Plus(BPI+)
SW security	Stateful Packet Inspection Firewall (SPIF)
	Customizable firewall security levels
	Intrusion detection and prevention
	Demilitarized Zone (DMZ)
	Multilevel access policy

ORDERING INFORMATION

Model	Description
1001462	TG6442A/NA,WIFI 6 VOICE GATEWAY,DOCSIS 3.1,2X2,DOCSIS 3.0,32X8,100-240VAC NA ADAPTER