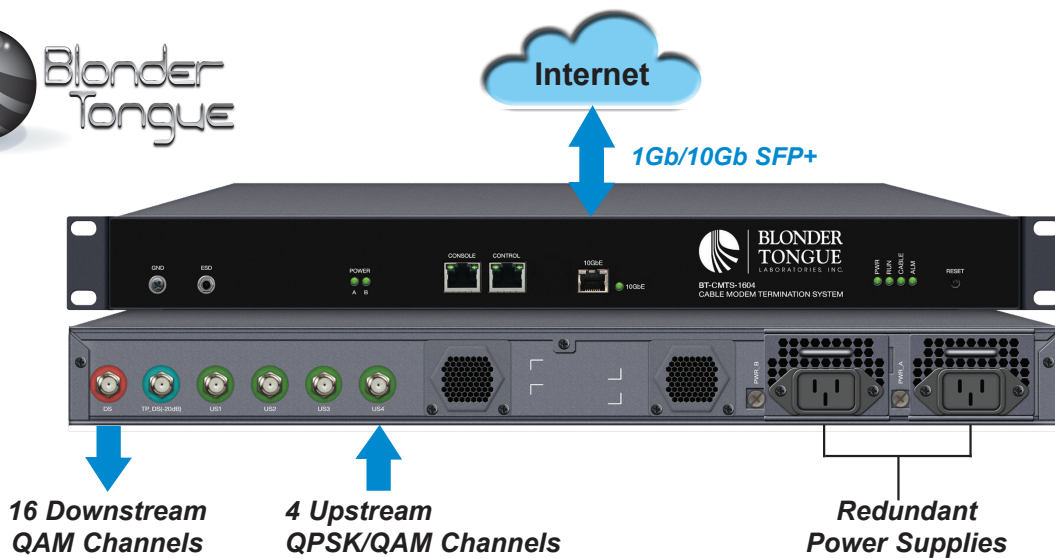


BT-CMTS-1604-U Cable Modem Termination System

The **BT-CMTS-1604** is a full featured, DOCSIS 3.0 compliant Cable Modem Termination System targeted to provide two-way video, voice, and data services in locations such as hospitality, healthcare, MDU, correctional institution, business enterprise, and university campus settings. The product feature set includes those required by the most demanding service applications: support for more than 1,000 DOCSIS 3.0 cable modems; Business Services Over DOCSIS (BSOD) compliance, including VLAN based traffic separation using either Option 60, or the L2VPN Q-in-Q method; multicast linear video delivery; active spectrum monitoring; and provisioning via an on-board DHCP server. The unit provides up to 16 downstream (DS) QAM 1024 channel capacity, and up to 4 upstream QAM 256 channel capacity (16X4). If there becomes a need for greater data throughput in the future, the unit may be remotely license upgraded to 32 downstream (DS) QAM 1024 channel capacity, and up to 10 upstream (US) QAM 256 channel capacity.

See Related Products **BT-CMTS-1604 LIC UPG** and **BT-CMTS-3210**.



Features

- DOCSIS/EuroDOCSIS 3.0/2.0 compatible
- High Data Throughput:
 - 16 downstream channels, up to QAM 1024
 - 4 upstream channels, up to QAM 256
- Standard HE Rack Mounting (1RU 19")
- Redundant Universal Hot-swappable Power Supplies
- Supports Multicast Traffic to Minimize BW Consumption
- Provides Optimal Load Balancing to Reduce Traffic Congestion
- Quality of Service (QoS) for Optimized Traffic Priorities
- Channel Bonding for Maximum Data Throughput
- BSOD Standard VLAN Traffic Separation by Either the Option 60 or L2VPN Q-in-Q (Needs BT DMM)
- SFP+ Port Auto-Negotiates to Either 1Gb or 10Gb Traffic
- Displays Performance in Real-time to Ease RF Network Troubleshooting Both Downstream and Upstream
 - Channel Utilization
 - SNR
 - RF Level
 - Spectrum Monitoring (Upstream Only)
- Internal DHCP Server
- Dual-Stack IPv4/IPv6

PRELIMINARY
Pre-Production Specifications
Subject to Change

Ordering Information

Model	Stock #	Description
BT-CMTS-1604-U	2342A 1	DOCSIS/EuroDOCSIS 3.0 CMTS (Cable Modem Termination System)

BT-CMTS-1604-U Cable Modem Termination System

Specifications

Input/Output Interfaces

Data Port 1GbE/10GbE: Standard:	SFP+ Ethernet
RF Upstream Connectors: # of Channels: Frequency Range: Modulation Mode: Bandwidth: Receive Level: QoS Flow:	4x "F" Conn. 4 5-65 MHz QPSK/QAM16, QAM32, QAM64, QAM256 1.6, 3.2 or 6.4 MHz -7 to +23 dBmV (53 to 83 dBuV) @ 6.4 MHz -10 to +20 dBmV (50 to 80 dBuV) @ 3.2 MHz -13 to +17 dBmV (47 to 77 dBuV) @ 1.6 MHz 4K
RF Downstream Connectors: # of Channels: Frequency Range: Modulation Mode: Bandwidth: RF Level: QoS Flow:	1x "F" conn. 16 52-1002 MHz QAM64, QAM256, QAM1024 6.0/8.0 MHz +44 dBmV (104 dBuV) 4K

System Functions

DHCP:	DHCP relay/snooping DHCP bundle DHCP lease query
DHCPv6:	DHCPv6 relay/snooping DHCPv6 bundle DHCPv6 lease query DHCPv6-PD Supports Vendor Class string to identify equipment type Supports Insert Remote-ID, Interface-ID, CMTS capabilities and CM MAC
IPv6:	IPv4 and IPv6 dual-stack
VLAN & L2VPN:	802.1ad/802.1q/subnet VLAN Service flow-based VLAN addition or deletion VLAN addition according to option60 L2VPN support VLAN conversion
QoS:	Static service flow/dynamic service flow/ service class DOCSIS 3.0 USCB scheduling PowerBoost
MAC Domain Management:	MDD & MDF enable and disable MTC & MRC enable and disable UDC enable and disable Piggyback, shared-secret, channel bonding
Multicast:	Multicast authentication Static Multicast IGMP V2/V3 Snooping
Load balance:	RLBG/GLBG
Spectrum Monitor:	Reverse spectrum monitoring (0-81 MHz)
Automatic Opening:	Automatic Opening and upgrade based on DHCP and TFTP PN8600 series OLT unified opening and upgrade support

PRELIMINARY
Pre-Production Specifications
Subject to Change

Alarms/Monitoring/Control

Local Monitoring:	1x Power A (Power Supply A) 1x Power B (Power Supply B) 1x LED Link Indication for SFP+ 1x PWR 1x RUN 1x CABLE 1x ALM 1x Reset
Control:	GUI-based menu via Web Browser (1x RJ45 connector; 1GbE)
Console:	1x RJ45 Front-Panel Connector (Serial)

General

Electrical	
Power:	90V-264VAC, 50/60 Hz (dual redundant power supplies)
Power Consumption:	52 W
Mechanical	
Operating Temperature:	32 to 104 °F (0 to 40 °C)
Operating Humidity:	10% to 90% (Non-condensing)
Dimensions (W x D x H):	19"x 11.8" x 1.75" (480mm x 300mm x 44mm)
Weight:	12 lbs (5.5kg)