CMTS EDGE MAX

DOCSIS 3.1 / 3.0 / 2.0 CABLE MODEM TERMINATION SYSTEM

KEY FEATURES

- DOCSIS/EuroDOCSIS 3.1/3.0/2.0 compatible
- 1RU 19" chassis with dual redundant power supplies - hot-swappable
- Mixed-Mode feature supports simultaneous operation of DOCSIS 3.1 and 3.0 cable modems
- Two Upstream Service Groups supported
- Supports 500 cable modems in Mixed-Mode*
- Intuitive and easy-to-use GUI and CLI interfaces
- Prioritizes network traffic with QoS
- Layer-2 / 3 VLAN Support
- L2VPN Support for Business Service Over DOCSIS (BSOD)
- Real-time CM and CPE Info
- Upstream Spectrum Monitoring
- Automatic Modem Frequency Hopping
- Dynamic Modem Load Balancing
- Internal DHCP server for modems only
- Dual-Stacked IPv4/IPv6 capability
- Bundle multiple QAM channels for multicast video delivery

PRODUCT OVERVIEW

The **CMTS Edge Max** is a DOCSIS 3.1/3.0/2.0 Cable Modem Termination System targeted for medium to large-size deployments to provide two-way data services on a coaxial network with multi-Gigabit bandwidth.

The ability of the **CMTS Edge Max** to operate in "Mixed-Mode" provides the flexibility to service DOCSIS 3.1 and DOCSIS 3.0 modems simultaneously. This offers a convenient means of migration to DOCSIS 3.1 with gradual or partial deployments of DOCSIS 3.1 modems to aid in controlling upgrade expenditures. Mixed-Mode deployments enable multi-tier Gigabit data services you can leverage for enhanced data services to specific residents, guest rooms, or public spaces.

ORDERING INFORMATION

MODEL	STOCK#	DESCRIPTION
CMTS Edge Max	2341	DOCSIS/EuroDOCSIS 3.1 / 3.0 / 2.0 CMTS

REV: 032822

CMTS EDGE MAX
SPECIFICATIONS

BLONDER TONGUE LABORATORIES

INPUT / OUTPUT INTERFACES			
RF DS	2x "F" Female Connector (1 is -20dB test point)	RF US	4 x "F" Connector (2 per service group)
10GbE	1x SFP+ (Ethernet)	Quality of Service Flow	4K

	DOWNSTREAM	UPSTREAM
CHANNEL FREQUENCY RANGE		
DOCSIS 3.1	108/258~1218 MHz	5~85/204 MHz
DOCSIS 3.0	54/87/108~1003 MHz	5~42/65/85 MHz
WORKING CHANNEL		
DOCSIS 3.1	6 OFDM	2 OFDMA
DOCSIS 3.0	32 (DOCSIS)	12 (DOCSIS) (Two service groups supported)
Video QAM	Narrowcast: 32 Channels Broadcast: 64 Channels	
CHANNEL WIDTH		
DOCSIS 3.1	24~192 MHz	6.4~96 MHz
DOCSIS 3.0	6 / 8 MHz	1.6 / 3.2 / 6.4 MHz
MODULATION MODE		
DOCSIS 3.1	OFDM (16, 64, 128, 256, 512, 1024, 2048, 4096 QAM)	OFDMA (BPSK, QPSK, 16 / 32 / 64 /128 / 256 / 512 / 1024 / 2048 QAM)
DOCSIS 3.0	64 / 256 / 1024 QAM	QPSK, 16 / 32 / 64 / 256 QAM
RECEPTION LEVEL RANGE		
DOCSIS 3.1	N/A	
DOCSIS 3.0	N/A	
MAX QAM OUTPUT LEVEL		
@ 6MHz	Mixed Mode depends on number of active carriers Each OFDM channel enabled drops RF power output by 3 dBmV 42 dBmV @ 32 channels 45 dBmV @ 16 channels 49 dBmV @ 8 channels 52 dBmV @ 4 channels 56 dBmV @ 2 channels 60 dBmV @ 1 channel	

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SYSTEM FUNCTIONS

IP Stack	Supports IPv4 and IPv6 dual-stack
DHCP	Supports DHCP Relay/Snooping Supports DHCP Lease Query Supports Opt. 60 to Identify Equipment Type Supports Insert Remote-ID, Interface-ID, CMTS capabilities and CM MAC
DHCPv6	Supports DHCPv6 Relay/Snooping Supports DHCPv6 Lease Query Supports DHCPv6-PD Supports Opt. 60 to Identify Equipment Type Supports Insert Remote-ID, Interface-ID, CMTS capabilities and CM MAC
VLAN & L2VPN	Supports 802.1ad/ 802.1q Supports service flow-based VLAN addition or deletion Supports VLAN addition according to device type Supports the L2VPN
Quality of Service	Static / Dynamic Service Flow / Service Class DOCSIS 3.0 USCB Scheduling; PowerBoost
MAC Domain Management	MDD and MDF Enable & Disable MTC and MRC Enable & Disable UDC Enable & Disable Upstream Automatic Freq. Hopping Support Piggyback, Shared-Secret, Channel Bonding
Multicast	Supports Multicast Authentication Supports IGMP V2/ V3 Snooping Supports MLD V1/ V2
Load Balance	Supports RLBG/ GLBG Supports load balance priority

ALARMS / MONITORING / CONTROL

Local Monitoring LED Indicators	Power Supply A and Power Supply B GbE - ready and traffic LED's Power status Run (operational) status Cable RF active status Alarm status
Control	CLI via SSH or Telnet GUI-based menu via Web Browser (1x RJ45 connector; 100 Mbps)
Console	1x RJ45 Front-Panel Connector

GENERAL

Dimensions (W x H x D)	19.0 x 1.75 x 11.8 in (483 x 45 x 300 mm)
Weight	12 lbs (5.5 kg)
Power	90V-264VAC, 50-60Hz (Dual Redundancy Power Supplies)
Power Consumption	61 W
Operating Temp.	32 to 104 °F (0 to 40 °C)
Operating Humidity	10% to 95%, non-condensing

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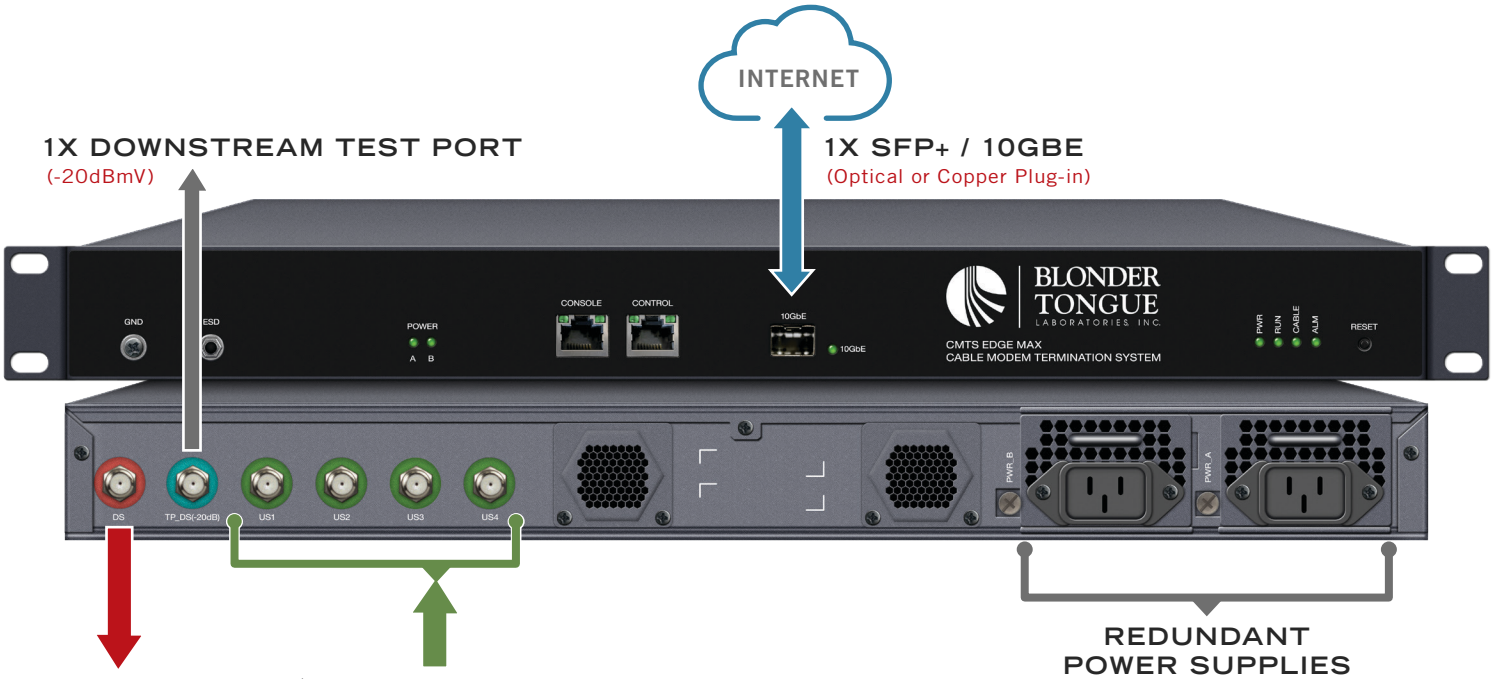
I/O OVERVIEW



DOWNSTREAM	UPSTREAM

MIXED MODE

32 QAM-256 (6 MHz Ea.) 4 OFDM (192 MHz Ea.)	12 QAM-64 (variable-width) Available in 2 service groups

STANDARD 3.1 MODE

6 OFDM (192 MHz Ea.) Practical Data Rate	2 OFDMA (96 MHz Ea.)

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