

# CORNERSTONE®

## CABLE MODEM TERMINATION SYSTEM 1500



### APPLICATION

The Cornerstone Cable Modem Termination System 1500 (CMTS 1500) is a DOCSIS™ 1.1 Qualified and Euro-DOCSIS 1.1 Qualified headend solution that enables Broadband Service Providers to provide reliable, high-speed services to their customers over DOCSIS and PacketCable™ based NIU devices.

### BENEFITS

- Optimizes resources through simplified installation and management
- Enables operators to maximize revenues by providing high-speed services to their customers
- Enables operators to reduce maintenance costs through increased network availability and performance
- Ensures cable services security with enhanced security features
- Protects existing investments and prepares operators for tomorrow



# CORNERSTONE®

## CABLE MODEM TERMINATION SYSTEM 1500



### FEATURES

- DOCSIS 1.1 Qualified and Euro-DOCSIS 1.1 Qualified
- Supports DOCSIS 1.1/Euro-DOCSIS 1.1 Quality of Service standards enabling operators to provide advanced services such as Telephony over IP (ToIP™)
- Enables operators provide guaranteed data rates and implement tiered data services
- Offers operators the ability to upgrade current equipment to DOCSIS 1.1/Euro-DOCSIS 1.1 functionality
- Employs “Intelligent Channel Seek™” technology
- 28.9 year mean-time-between-failure and less than 20 minute mean-time-to-repair
- Provides redundant upstream support using eighth upstream receiver card as spare
- Implements Layer 3 filtering and forwarding functionality
- Reduces cost and network complexity via Ethernet path redundancy with automated switchover
- Installs to full operational capacity in as little as 5 minutes after power-up
- Remote control of CMTS using SNMP and CLI commands
- Offers complete set of security features that comply with DOCSIS/Euro-DOCSIS Baseline Privacy Plus (BPI+) Specifications for cable services security and private end-to-end communications

### SPECIFICATIONS

| <b>Physical</b>                                |  |
|--|--|
| Operating Temperature °F (°C)                  | 32-104 (0-40)                                  |
| Storage Temperature °F (°C)                    | -40 to 151 (-40 to 66)                         |
| Relative Humidity (Min.-Max.) (Non condensing) | 10-90%   |
| Input Voltage (Min.-Max.)                      | 88-264 Vrms @ 47-63 Hz or -48 V dc             |
| Input Power (W) (Max.)                         | 100  |
| Dimensions (H x W x D) in. (cm)                | 2.62 x 17.35 x 16.56 (6.65 x 44 x 42)          |
| Weight lbs. (kg)                               | 18 (8.16)                                      |
| <b>Installation Environment</b>                |  |
| Packaging Type                                 | 19" rack-mounted or standalone                 |
| Power Supply                                   | Slimline package/standalone                    |
| Ethernet Connectivity                          | Redundant, self-sensing 10/100 Base-T Ethernet |
| Cable Plant Connectivity                       | 9 F-connectors: 1 downstream, 8 upstream       |
| <b>RF</b>                                      |  |
| <b>Downstream</b>                              |  |
| RF Channel Width (MHz)                         | 6 (DOCSIS) or 8 (Euro-DOCSIS)                  |
| Frequency Range (MHz)                          | 88-860 (band edges)                            |
| Modulation (QAM)                               | 64 or 256                                      |
| Forward Error Correction                       | Reed Solomon                                   |
| RF Output Level (dBmV)                         | 50-61  |
| Output Impedence (ohms)                        | 75   |
| Return Loss (dB)                               | 14   |
| Transmit Output Power Accuracy (dB)            | 1  |

Specifications are subject to change without notice.

# CORNERSTONE®

## CABLE MODEM TERMINATION SYSTEM 1500



### SPECIFICATIONS (CONT'D)

| Upstream                                    |   |
|---|---|
| RF Channel Spacing<br>Frequency Range (MHz) | Variable, 200 KHz-3.2 MHz<br>5-42 (band edges) (DOCSIS)<br>or 5-65 (band edges) (Euro-DOCSIS) |
| Modulation                                  | QPSK or 16 QAM  |
| Forward Error Correction                    | Concatenation of Reed Solomon Block Code<br>and Trellis Code                                  |
| Receive Input Level (dBmV)                  | -4 to 26 (operator configurable)  |

### ORDERING INFORMATION

| Model #  | Part # |
|--|--------|
| CMTS 1500, ac Power                                  | 254317 |
| CMTS 1500, dc Power                                  | 254318 |
| CMTS 1500, 4.0 Software                              | 254330 |
| CMTS 1500, 4.2 Software                              | 708177 |
| CMTS 1500, 4.2 Software (Upgrade for 4.x Users)      | 708178 |
| CMTS 1000-1100 Upgrade (Factory Installed), ac Power | 254319 |
| CMTS 1000-1100 Upgrade (Factory Installed), dc Power | 254498 |
| CMTS ac to dc Power Conversion                       | 706694 |

Specifications are subject to change without notice.