

The **Terrace TC1200 MDU** gateway is a multi channel QAM to analog RF converter. Demodulated MPEG-2 transport streams from multiple QAMs are decrypted, decoded to analog, then converted to the correct RF channel. The TC1200 can demodulate up to 16 QAM carriers, select the MPEG-2 transport streams and remap them to 82 standard definition MPEG-2 program streams which are NTSC modulated to analog video channels. The TC1200 is a flexible, compact and cost effective way to bring a digital lineup back into the analog realm for an MDU bulk account.

## Features

- Highly integrated - Combines QAM demodulation, decryption, NTSC modulation and upconversion in a single product
- Flexibility - Offer both analog and high frequency digital bypass in the same chassis
- Compact - design saves space and power
- Demodulate up to 16 QAM channels and decrypt up to 72 SPTS streams
- Convert up to 82 SPTS to analog channels
- Supports up to 12 Multi-Channel CableCARDS™ to decrypt streams
- Scalable - deploy additional units as needed
- Power Redundancy - two load sharing power supplies (one takes over if the other fails)
- Compatible with HITS QT+



*NOTE: Multi-channel CableCARDS are not included with unit*

*CableCARD is a trademark of Cable Television Laboratories, Inc.*

# Terrace: TC1200 - Specifications

## CATV Port

<b>Connector</b>	1 x 5/8"-24
<b>Input Impedance</b>	75 Ω
<b>Modulation</b>	64/256 QAM (Annex B)
<b>Tuning Block Freq Range</b>	54 - 1002 MHz (Band Edges)
<b>Max. QAMs Demodulated</b>	16 (per chassis)
<b>Input Level (Downstream)</b>	+21 to +31 dBmV (256 QAM)
<b>Output Level (Upstream)</b>	0 dB Gain ± 2dB (with 0 dB pad installed)**
<b>CAS Type</b>	DigiCipher II, PowerKEY, NDS
<b>CAS Format</b>	CableCARD
<b>Return Loss</b>	-13 dB (5 - 864 MHz) -12 dB (864 - 1002 MHz)

\*\* Pad value indicated is the shipping default value

## Mixed Services Port

<b>Connector</b>	1 x 5/8" - 24
<b>Number of Analog RF Channels</b>	82 x NTSC (2-78, 95-99) standard EIA channel plan
<b>Impedance</b>	75 Ω
<b>Frequency Range</b>	5 to 42 MHz (Upstream) 54 to 552 MHz (Analog)
<b>Output Level (Downstream)</b>	+22.5 dBmV per ch. ± 2.5 dB (typical)
<b>Insertion Loss (564-1002 MHz)</b>	3.5 dB ± 2 dB (with 3 dB pad installed)**
<b>Input Level (Upstream)</b>	10 to +35 dBmV
<b>Return Loss</b>	-10 dB (5 to 1002 MHz)
<b>Inband Carrier to Noise</b>	-55 dBc
<b>Audio</b>	Licensed BTSC/SAP
<b>EAS Support</b>	SCTE-18 Force Tune
<b>VBI Support</b>	SCTE-20,21
<b>AC Power Passing</b>	< 15A

\*\* Pad value indicated is the shipping default value

## Auxiliary Inputs

<b>Connectors</b>	3 x F-type, female
<b>Impedance</b>	75 Ω
<b>Input Type</b>	Channel 3 NTSC
<b>Input Level</b>	0 to +15 dBmV
<b>Noise Figure</b>	10 dB
<b>Output Frequency</b>	Each auxiliary channel can be placed on any channel between 54 and 552 MHz
<b>Carrier-to-Noise Ratio (CNR)</b>	51 dB at 0 dBmV - Continuous Wave Input

## General

<b>Dimensions</b>	21.1" x 16" x 8.5" (53.6 cm x 40.6 cm x 21.6 cm)
<b>Weight</b>	43.5 lbs (19.7 kg)
<b>Input Voltage</b>	45 to 90 VAC Line Power
<b>Power Consumption</b>	< 150 W
<b>Operational Temperature</b>	32°F to 122°F (0°C to + 50°C) ambient*

\* For Indoor Use Only

## Transport Stream Details

<b>Video Format</b>	MPEG-2, MP@ML 4:2:0 chroma sampling 4:3 aspect ratio
<b>Video Resolution</b>	720x480, 704x480, 544x480, 528x480, 352x489
<b>Video Bitrate</b>	Up to 15 Mbps
<b>Audio Formats</b>	Dolby* Digital (AC3)
<b>Audio Bitrate</b>	Dolby Audio 512 kbps max
<b>Audio Sample Rates</b>	32 kHz, 44.1 kHz, 48 kHz
<b>Audio Downmix</b>	Multichannel downmix to stereo or mono as necessary

## Control & Management

<b>Console</b>	Internal USB Type B
<b>Protocols</b>	SNMP, DHCP, TFTP
<b>Embedded Cable Modem</b>	DOCSIS 2.0
<b>Ethernet Management (Option EMGMT)</b>	RJ45, 10/100 (replaces cable modem)

## Replaceable Components

HFCATVEQ0-02L	RPAD JXP0-02L
HFCATVEQ6-02L	RPAD JXP3-02L
ZMShunt-01	

\*Dolby Digital is a registered trademark of Dolby Laboratories

## Terrace (TC1200) - High Level Functional Block Diagram

