advanced media technologies®

MODEL

TERRACE TC600

MDU GATEWAY

vecima networks

The **Terrace TC600** 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 Terrace TC600 can demodulate up to 8 QAM carriers, select the MPEG-2 transport streams and remap them to 46 standard definition programs which are NTSC modulated directly to analog video channels. The Terrace TC600 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
- Demodulate up to 8 QAM channels and decrypt up to 36 single program streams
- Convert up to 46 single programs to analog channels in a single unit
- Supports up to 6 Multi-Stream CableCARDs™ to decrypt streams
- Compact 1RU design saves space and power
- Scalable – combine up to 3 co-located units to generate 90 contiguous channels
- Compatible with HITS QT+
- Compatible with Terrace View for Global Monitoring

Terrace: TC600 - Specifications

CATV Port

Connector	F-Connector, female
Input Impedance	75 Ω
Modulation	64, 256 QAM (Annex B)
Tuning Block Frequency Range	54 - 1002 MHz (Band Edges)
Max. QAMs Demodulated	8 per chassis
Input Level	-12 to 15 dBmV (256 QAM)
CAS Type	MediaCipher®, PowerKEY™
CAS Format	CableCARD™
Return Loss	15 dB (5 - 42 MHz and 54 - 1002 MHz)

Transport Stream Details

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

Output Port

Connector	F-Connector, female
Impedance	75 Ω
Number of Analog RF Channels	**TC600:** 46 x NTSC (2-42, 95-99), standard EIA channel plan **TC600HF:** ***High A**** 45 x NTSC (33-77), standard EIA channel plan **TC600HF:** ***High B**** 45 x NTSC (42-86), standard EIA channel plan
Frequency Range	**TC600:** 54 to 336 MHz (Analog) **TC600HF:** ***High A**** 276 to 546 MHz (Analog) **TC600HF:** ***High B**** 330 to 600 MHz (Analog)
Return Loss	13 dB minimum **TC600:** 54 to 336 MHz **TC600HF:** 276 to 600 MHz
Video	NTSC
Audio	Licensed BTSC/SAP
EAS Support	SCTE-18 Force Tune
VBI Support	SCTE-20,21
Output Level	26 dBmV ± 2.5 dB per channel
Carrier-to-Noise Ratio	≥ 49 dB/4 MHz
Composite Triple Beat	≤ -52 dBc
Composite Second Order	≤ -55 dBc
Cross Modulation	≤ -52 dBc
Inband Spurious (-0.75 to +4.2 MHz relative to video carrier)	< -51 dBc

* ***High A*** or ***High B*** operation is a configurable setting in TC600HF

Control & Management

Console	USB Type B
Protocols	SNMP, DHCP, TFTP
Embedded Cable Modem	DOCSIS 2.0
Ethernet Management	RJ45, 10/100 Ethernet

Chassis / Power / Environmental

Dimensions (H x W x D)	1.75" x 19" x 18" (4.5 cm x 48.3 cm x 45.7 cm)
Weight	10 lbs. (4.6 kg)
Input Voltage	90 to 240 VAC, 50 to 63 Hz
Power Consumption	< 100 W
Operational Temperature	32° to 122°F (0° to 50°C) ambient

Ordering Options

TC600	**Terrace Indoor MDU Gateway (6 CC capacity)**
TC600HF	**Terrace Indoor MDU Gateway (6 CC capacity),High Frequency band**

TC600 channel plans

TC600 Channel Plan	Contiguous Encrypted Lineup (with FM)	Contiguous Encrypted Lineup (no FM)	Number of CableCARDs Required*
Single Unit	**36 Channels**		**6 Total**
TC600	2-32, 95-99	2-37	6
TC600HF (High A Setting)	33-68 ... 42-77	33-68 ... 42-77	6
TC600HF (High B Setting)	42-77 ... 51-86	42-77 ... 51-86	6
Dual Stack	**72 Channels**		**12 Total**
TC600	2-32, 95-99	2-37	6
TC600HF (High A Setting)	33-68	38-73	6
Triple Stack	**90 Channels**	**85 Channels**	**15 Total**
TC600	2-32, 95-99	2-37	6
TC600HF (High A Setting)	33-68	38-73	6
TC600HF (High B Setting)	69-86	74-86	3

* CableCARDs required assumes fully encrypted channel lineup with 6 channels per CableCARD. Unencrypted channels are not counted against the CableCARD decryption limit.

The TC600 can output up to 46 Channels (36 encrypted + 10 clear)

The TC600 Channel range is 2-42, 95-99 meaning any channel in that range can be configured to output, but will be disabled otherwise.
For example: 2-30, 34, 95-99

The TC600HF and TC600LF channel plans can overlap.
For example: TC600LF ➜ 2-32, 34, 36, 38
TC600HF (High A) ➜ 33, 35, 37, 39-77

Publish Date: 2017-Jan-27 (r10)