

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+

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
Audio Sample Rates	32 kHz, 44.1 kHz, 48 kHz
Audio Downmix	Multichannel downmix to stereo or mono

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

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	< -51 dBc (-0.75 to +4.2 MHz relative to video carrier)

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

Ordering Options

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

Channel Lineup Examples

TC600 Channel Plan	Available Channels	Contiguous Encrypted Lineup (with FM)	Contiguous Encrypted Lineup (no FM)	Number of CableCARDS Required*
Single Unit	46 Low, 45 High	36 Channels		6 Total
TC600	2-42, 95-99	2-32, 95-99	2-37	6
TC600HF (High A Setting)	33-77	33-68 ... 42-77	33-68 ... 42-77	6
TC600HF (High B Setting)	42-86	42-77 ... 51-86	42-77 ... 51-86	6
Dual Stack	81 Channels	72 Channels		12 Total
TC600	2-42, 95-99	2-32, 95-99	2-37	6
TC600HF (High A Setting)	33-77	33-68	38-73	6
Triple Stack	90 Channels	90 Channels	85 Channels	15 Total
TC600	2-42, 95-99	2-32, 95-99	2-37	6
TC600HF (High A Setting)	33-77	33-68	38-73	6
TC600HF (High B Setting)	42-86	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