

NEW

DTA 315x Digital Turn Around Router

The DTA-315x series is specifically designed for turning MPEG or DVB based digital television services via ASI, Satellite, or Terrestrial distribution into IP distribution. It is ideal for Telco TV and Broadband TV systems utilizing MPEG 2 or MPEG 4 AVC (H.264).



DOLBY DIGITAL DV3-T DV3

DTA Digital television service operators wishing to re-distribute MPEG or DVB based services as next generation IPTV based services will find the DTA ideal. Available inputs on the DTA-3150 model include two ASI, two satellite and two DVB-T terrestrial. Inputs options for the DTA-3154 include two ASI and four DVB-T terrestrial. All Adtec DTA models have GIGE output, optional ASI output and support multicast and unicast configurations including SPTS/UDP or RTP, MPTS/UPD or RTP. Additionally they support MPEG and DVB tables and conditional access capabilities including decryption and encryption. The DTA 315x is ideal for next generation television networks focused on IPTV.



applications

- **Telco IPTV / Broadband IPTV:** Cost effective and reliable delivery of video, audio and data services to an unlimited number of consumer set top boxes or PC/MAC clients on an IP network.
- **Satellite (DVB-S) Digital TV:** Turnaround of digital satellite programming to IPTV or ASI, without the need for external QPSK receivers. (DTA 3150)
- **Terrestrial (DVB-T) Digital TV:** Turnaround of digital terrestrial programming to IPTV or ASI, without the need for external COFDM receivers. (DTA-3150, 3154)
- **IP over MPEG 2 Transport:** Delivery of IP data services to set top boxes or computers over MPEG-2 transport using IP encapsulation.

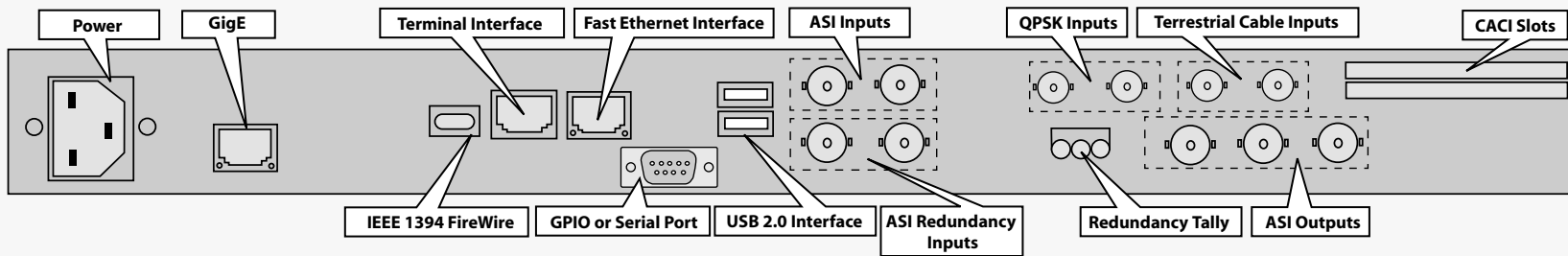
benefits

- **Conditional Access:** The DTA-3150 and DTA-3154 provide DVB-CSA and AES conditional access decryption and encryption capabilities. DVB-CSA decryption is facilitated through two rear mounted CACI slots and encryption is available as fixed key BISS or Simulcrypt based interfaces compatible with most major DVB-CSA CAS vendors. AES decryption and encryption includes support for Adtec's OST and Verimatrix VCAS for set top and computer-based decryption.
- **Integrated DVB-S and DVB-T Tuners:** The DTA-3150 features two integrated QPSK satellite tuners for receiving programming delivered via DVB-S and two integrated COFDM tuners for receiving terrestrial DVB-T. The DTA-3154 features four integrated COFDM tuners with the two ASI inputs.
- **Aggregation of ASI SPTS or MPTS services:** The DTA-3150 and DTA-3154 offer two DVB-ASI input ports enabling it to aggregate locally encoded SPTS or re-mixed MPTS from another router or receiver.
- **IPTV:** Gigabit Ethernet distribution of digital television services includes SPTS over UDP or RTP for Set Top and computer decoding and MPTS over UDP or RTP for bundled distribution.
- **ASI:** An optional 3 port mirrored ASI output interface provides integration with traditional distribution methods including Cable, Satellite, and Terrestrial.

- **Flexible Configuration & Control:** Controlling and configuring the DTA-3150 and DTA-3154 is easy. Whether using the integrated front panel keypad with LCD, Terminal or remote Web page interface, they respond rapidly and reliably to the desires of the operator.
- **IPTV Electronic Program Guide:** Adtec's edgeGuide Server integrates seamlessly with our DTA routers to deliver an interactive electronic program guide to IP based Set Tops or a PC/MAC edgePlayer and includes support for many IP based Set Tops. Adtec's edgeVOD enterprise VOD server, an optional service installed on the edgeGuide server, is ideal for small stream count implementations like medical, educational or hospitality. Interfaces to external VOD servers facilitate large stream count VOD requirements including direct to home Telco TV.

availability

	outputs		inputs		
	IP	ASI	ASI	DVB-S	DVB-T
DTA-3150	●		2	2	2
DTA-3150-ASI	●	●	2	2	2
DTA-3154	●		2	0	4
DTA-3154-ASI	●	●	2	0	4



The DTA-3154 does not have QPSK Input ports. They are replaced with 2 additional DVB-T inputs.

specifications

Front Panel

- 8 Button Tactile Raised keypad: Mode, Select, Enter, Escape, Up, Down, Left, Right
- Blue Translucent LCD
20 character by 2 row
- Front Panel Host LED's
Power, Alarm, Link, Busy, MPE
- Front Panel LEDs
Out (Alarm, ASI, GigE, CA)

DTA-3150 Specific

In (2 - ASI Ports, DVB-S 3 Port and Lock, DVB-S 4 Port and Lock, DVB-T 5 Port and Lock, DVB-T 6 Port and Lock)

DTA-3154 Specific

In (2 - ASI Ports, DVB-T 3 Port and Lock, DVB-T 4 Port and Lock, DVB-T 5 Port and Lock, DVB-T 6 Port and Lock)

ASI Inputs

- ASI x 2 (BNC)
- 188 or 204 Byte mode
- SPTS or MPTS
- 211 Mbps per input
- 256 PIDs per input
- Fill scrubbing on input
- Input Modes
Auto (Remap all services)
Manual (Add/Drop/Remap PID/Services)
Pass (Pass all services as-is)
MHP Injector
SI Injector

QPSK Inputs (Satellite)

- 3150 (2) 3154 (0)**
- QPSK
- Antenna Input
L-Band Input 950 - 2150 MHz
- Input Level
-65 dB to -25 dB
- LNB Power
Automatic Polarity Sensing
(Horizontal - 14V-Vertical - 18V)
Automatic Over and Under Current Protection
22 KHz Tone
(High Frequency Block Up-convert)
DISEqC
- Symbol Rate
2 to 45 MS/s
- Forward Error Correction (Physical)
DVB Viterbi FEC
Automatic Sensing
1/2, 2/3, 3/4, 5/6, 7/8
Reed Solomon (16 bits)
- 188 or 204 Byte mode
- SPTS or MPTS
- 72 Mbps per input

- 256 PIDs per input
- Fill scrubbing on input
- Modes
Same as ASI

Redundancy

- 1+1 IP and ASI
- ASI x 2 (BNC inputs for auto switch)
- No external controller required

DVB-T Inputs (Terrestrial)

- 3150 (2) 3154 (4)**
- COFDM x 2 (Type F Female)
- Antenna Input
UHF: 470 MHz to 862 MHz
VHF: 174 MHz to 230 MHz
- Input Level
-88 dB to -20 dB
- Channel Bandwidth
6, 7 or 8 MHz
- Channel Assignment
CCIR Channel and +/- 166.666 KHz offset
- Functional
2k and 8k carrier non hierarchical and hierarchical (DVB-T and DTG compliant)
- Modulation Modes
QPSK, 16 QAM, 64 QAM
- Guard Interval Modes
1/32, 1/16, 1/8, ¼ active symbol duration
Automatic Sensing
- Forward Error Correction (Physical)
DVB Viterbi FEC
Automatic Sensing
1/2, 2/3, 3/4, 5/6, 7/8
- 188 or 204 Byte mode
- SPTS or MPTS
- 72 Mbps per input
- 256 PIDs per input
- Fill scrubbing on input
- Modes
Same as ASI

Outputs

- Gigabit Ethernet
SPTS over UDP or RTP
MPTS over UDP or RTP
150 Mbs
Very low jitter

Output Options

- ASI (model is DTA 3150-ASI)
ASI Mirrored (BNC x 3)
Byte or Burst Mode
54 Mbs Byte
211 Mbs Burst
Jitter less than 150 (nS)

Table Processing

- No Tables
- MPEG Tables
PAT
CAT (if CA is enabled)
PMT
- DVB Tables (Add/Drop/Remap DVB Services)
NIT
SDT
TDT/TOT
EIT
- ATSC Tables (Add/Drop/Remap ATSC Services)
VCT (Cable or Terrestrial)
MGT
STT
RRT
EIT (1-4)
- DCII Tables (Add/Drop/Remap Digicypher services to DVB or ATSC)

IP Data Encapsulation (ISO 13818-6 MPE)

- EN 301 192 Encapsulation of IP Datagrams over VCT (Cable or Terrestrial)
- Unicast and Multicast Support
- 32 Routes
- 32 PIDs

IP Data de-capsulation (ISO 13818-6 MPE)

- EN 301 192 de-capsulation of IP Datagrams
- 16 PIDs
- 300 Mbs

Conditional Access Encryption

- DVB-Common Scrambling Algorithm (CSA)
- DVB Simulcrypt TS 103 197 v 1.2.1 and SCTE OpenCAS™ DVS-278 compliant
- FIPS 140-2 hardware based random number generator (RNG)
- Advanced Encryption Standard (AES)
Adtec Open Secure Transport (OST)
IP based encryption for use with Adtec IRDS
IP Set Top and Computer compatibility
- Current 3rd Party CA Vendors include:
- CSA:
Irdeto
Conax
EuroCAS
KeyFly
Xcrypt
- AES:
Verimatrix

Host Platform

- PowerPC
- Adtec optimized Linux Kernel
- 10/100 Ethernet RJ-45 (Eth 0)
- 10/100/1000 Ethernet RJ-45 (Eth 1)

what's included

- DTA 3150 or 3154 Digital Turn Around Router
- Accessory Kit: One 3 pin alarm tally plug, four rack mount screws with washers.
- Communication Kit to connect the unit to an external computer via RS232 (Adtec PN: comkit2). The kit includes an RJ-48 line to a DB-9F connector.
- Adtec Startup CD
- DTA Operations Manual
- Ethernet Cable (10 foot long) Used for LAN/WAN or Terminal connectivity
- US Power Cord (6 foot long)

Note: Specifications subject to change without written notice