

# T-Mux IP/IP™

**Hardware Based Professional Transport Stream Multiplexer-Demultiplexer with Gig/E Input – Combines or Uncombines 2 to 7 Incoming MPEG-2 and or H.264 IP Transport Streams, SPTS or MPTS. Supports Hundreds of Output PIDS.**

**Features Gig/E Inputs and Outputs. After PID Filtering or PID Addition, Automatically Re-generates PSI and SI Tables. Support for DVB Standard Table Editing. Able to Insert or Remove Electronic Program Guides and Local Programming into Incoming MPTS Streams Arriving via IP Backbone. Designed to Groom Many IP Streams for Delivery over IP Backbones to STBs or Smart TVs where IP PIDS need to be Mapped to Channels. Can be used with VisualOn, JW Player, and Other High Level Mobile Applications that Expect MPTS over IP.**



Front



Rear



## Features

- Multiplexes two to seven MPEG-2 and H.264 transport streams (SPTS/MPTS)
  - Inputs: 7 IP inputs (10/100/1000 Mbps, UDP, RTP)
  - Outputs: One multiplexed stream to IP (UDP, RTP, 10/100/1000 Mbps) or optional ASI
- De-multiplexes single transport streams (SPTS/MPTS) to two to seven MPEG-2 and H.264 transport streams
  - Inputs: One IP input (10/100/1000 Mbps, UDP, RTP) or one optional DVB-ASI input
  - Outputs: 7 IP outputs (10/100/1000 Mbps, UDP, RTP)
- Option for one ASI input, seven UDP/RTP inputs, one ASI output, and one UDP/RTP output
- UDP Unicast and Multicast support
- Supports all video layers and profiles including Multi-view and 4:2:2
- Audio stream types supported: AC-3, Enhanced AC-3, MPEG Audio (Layers I, II, and III), AAC, DTS
- SMPTE 302M 8 channel audio (pass through)
- Transport packet size: 188 bytes
- LCD front panel controls plus web-based management
- Front panel connectors for IP inputs, for easy setup
- Transport stream input rates up to 40 Mbps per channel
- Transport stream output rates up to 400 Mbps
- Program filter and mapping
- PID filtering and mapping
- PSI (PAT/PMT) signaling
- PCR dejittering and restamping
- TS CBR to VBR conversion
- TS VBR to CBR conversion
- Bit rate conversion CBR to CBR, VBR to VBR

## Applications

- IP re-multiplexing
- Adding or dropping services in IP TV
- PID filtering
- IP over satellite or over RF
- Customizing Transport Streams
- Cable Television Edge QAM presentation

## Overview

IP is quickly becoming the dominant infrastructure for reliable delivery of digital content to broadcasters and head ends.

Multiplexers combine several MPEG-2 and/or H.264 transport streams into a single multiplex transport stream, or “mux” for short. They also combine several multiplexes into a single remultiplex, or “remux”.

The T-Mux IP/IP™ is a professional transport stream multiplexer with GigE inputs and output. It combines or multiplexes 2 to 7 incoming MPEG-2 and/or H.264 IP Transport Streams, SPTS or MPTS to MPTS. The muxed stream can be output to IP (UDP or RTP) or optional DVB-ASI.

Audio stream types supported are: AC-3, Enhanced AC-3, MPEG Audio (Layers I, II, and III), AAC, and DTS.

Both cable companies and IP TV operators source content via dedicated circuits or public internet. At the end point this device will feed DVB-S/S2 modulators, Edge QAMS, or VOD servers. This unit provides an affordable way to deliver multiplexed content across their broadband infrastructure.

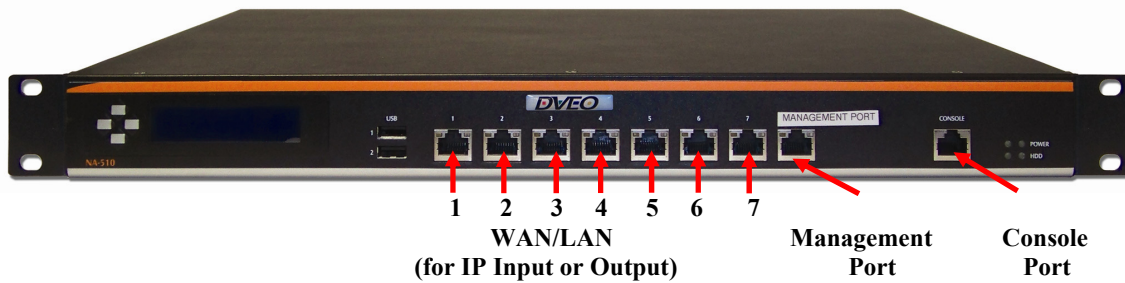


**Computer Modules, Inc.**  
11409 West Bernardo Court  
San Diego, CA 92127

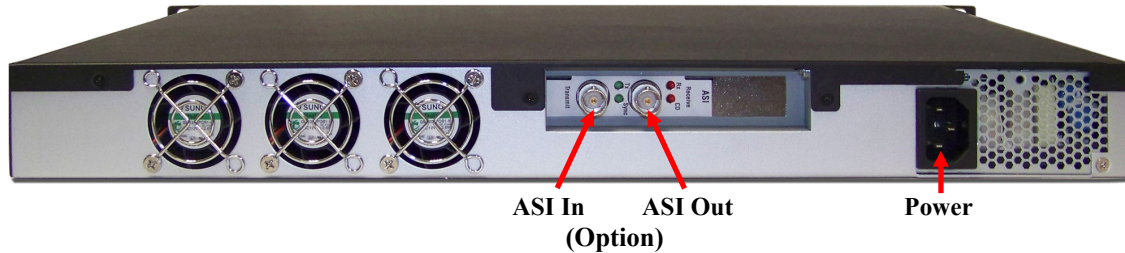
Tel: 858-613-1818 Fax: 858-613-1815

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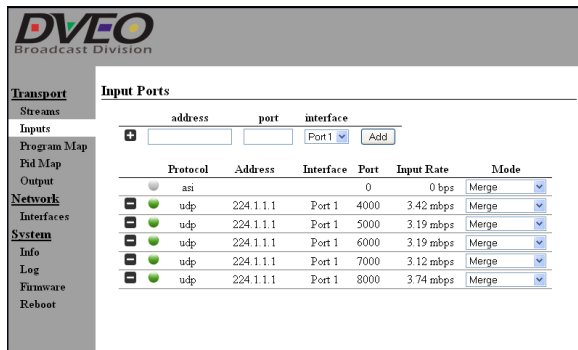
## Front Connectors



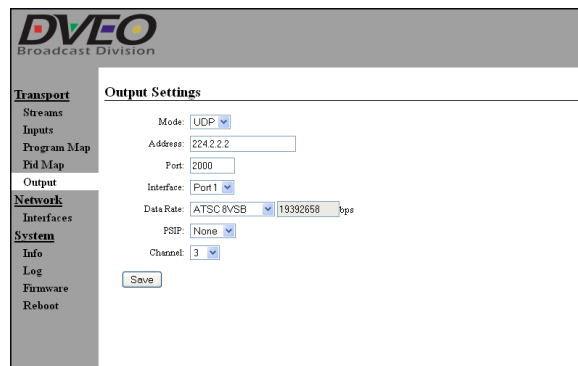
## Rear Connectors



## Sample GUIs



Input Ports



Output Settings

## Specifications

### Inputs

Inputs:	2-7 inputs from IP (H.264 or MPEG-2), plus one optional DVB-ASI input
IP Input Protocols:	UDP, RTP
Audio:	AC-3, Enhanced AC-3, MPEG Audio (Layers I, II, and III), AAC, and DTS SMPTE 302M 8 channel audio (pass through)

### Outputs

Outputs	One multiplexed stream to IP or optional ASI
IP Output Protocols:	UDP, RTP
Audio:	AC-3, Enhanced AC-3, MPEG Audio (Layers I, II, and III), AAC, and DTS SMPTE 302M 8 channel audio (pass through)

### Administration

Access:	Front panel controls, Web interface
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### Physical & Power

Power Supply:	270W ATX power
Temperature Range:	Operating: 0-45°C (32-113°F) Storage: -20-70°C (-4-158°F)
Non-operating Humidity:	10% to 95% relative humidity, non-condensing
Dimensions – 1 RU:	15.53 x 16.93 x 1.73 inches (L x W x H) 394.4 x 430.0 X 44.0 mm (L x W x H)
Weight:	21.61 lbs. (9.8 kg)
Conformities:	FCC class A , CE class A, RoHs

## Ordering Information

T-Mux IP/IP – Seven UDP/RTP inputs, one UDP/RTP output  
 T-Mux IP/IP+ASI – Option for one ASI input, seven UDP/RTP inputs, one ASI output, and one UDP/RTP output