Transport Stream Multiplexer (TSM) 2800

MPEG-2 DVB/ASTC TSM with Optional Smart Switching

The TSM-2800 provides extensive table processing and stream grooming and analysis capabilities for combining and manipulating streams. Support for opportunistic data and PSIP insertion provides operators with the ability to tailor streams for local broadcasts and fully utilize available bandwidth.

Applications

**ATSC and DVB Terrestrial Broadcast**
Combines and grooms streams from multiple sources including encoders, video servers and IRDs into a single transport stream. PSIP/SL Insertion is supported with an external generator—ASI or Ethernet.

**DVB Satellite**
Combine and groom multiple services into a single output for improved transponder utilization.

**Redundancy Switching**
With the smart switch option, the TSM-2800 can automatically detect faults in the input streams and switch to an alternate source. This switch is performed on a packet boundary, causing little or no impact to the services.

Capabilities

- Combines HDTV, SDTV, PSIP, data and multi-program transport streams into a single output multiplex
- Transport stream and channel re-branding, including network information
- Automatic PID conflict resolution
- Provides a universal “post insertion” capability for inserting external generated tables (PSIP, SI, RCS)
- Support for PSIP insertion over ASI or Ethernet
- Blocks irrelevant or unwanted programs and associated program data
- Configurable output data rate for transport stream re-rating
- NCR regeneration for DVB-RCS applications
- English or Spanish language user interface support

Features

- Smart switching option supports automatic redundancy switching
- Up to eight ASI input ports
- Input port #1 also supports SMPTE 310M
- Dual DVB-ASI and SMPTE 310M output
- DVB-ASI outputs mirror SMPTE 310M output
- SMPTE 310M interfaces operate at 19.392658 or 38.7853 Mb/s
- One ASI/SMPTE 325M flow control output for opportunistic data insertion
- Multiple time source options for time-table re-stamping (sources include SNTP or ATSC/DVB time-tables on input)
- 10 MHz and 1PPS inputs for NCR clock synchronization
- Easy to configure and manage
- Front panel control for local operation
- Web-based GUI
- SNMP remote management
## TECHNICAL SPECIFICATIONS—Transport Stream Multiplexer (TSM)

### INPUT SPECIFICATIONS

<table>
<thead>
<tr>
<th># of Transport Streams</th>
<th>Input Stream(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 4, 6 or 8 Inputs</td>
<td>1 RU Transport Stream Multiplexer licensed for selected number of active input ports</td>
</tr>
</tbody>
</table>

#### Interfaces
- 8 Max
- 7 dedicated ASI
- 1 selectable ASI or SMPTE 310M
- 1 PSIP over Ethernet

#### ASI Data Rates
- To 203 Mb/s, ASI burst or spread mode

#### SMPTE 310M Rates
- 19.39 or 38.78 Mb/s

#### Fault, Inputs and Outputs
- Isolates Short/Open Detect
- Common DB-25 connector

### OUTPUT SPECIFICATIONS

<table>
<thead>
<tr>
<th># of Transport Streams</th>
<th>Output Stream(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 4, 6 or 8 Outputs</td>
<td>1 repeated on dual ASI ports and dual SMPTE 310M ports, if activated</td>
</tr>
</tbody>
</table>

#### Interfaces
- 4 Max, configuration dependent
- 2 dedicated ASI
- 2 selectable SMPTE 310M
- 1 dedicated ASI SMPTE 325M

#### ASI Data Rates
- To 203 Mb/s, ASI spread mode

#### SMPTE 310M Rates
- 19.39 or 38.78 Mb/s

#### Fault, Inputs and Outputs
- Summary Form C contact

### INTERFACES
- Single 10/100 Base-TX Ethernet port (RJ-45)
- Web-based GUI with SNMP remote management

### POWER REQUIREMENTS
- Supply Voltage: 85 to 265 VAC, 50 or 60 Hz autosensing
- Power Consumption: <50 Watts

### PHYSICAL PARAMETERS
- Chassis: 1RU rackmount
- Dimensions (H, W, D): 4.5 cm x 43.2 cm x 39.4 cm (1.75" x 17" x 15.5")
- Weight: 5.6 kg (12.5 lbs.)

### ENVIRONMENTAL CONDITIONS
- Temperature: 0° to 45° C (32° to 113° F)
- Humidity: 5% - 95% non-condensing
- Shock: 3.5g @ 10 ms duration
- Vibration: 0.5g @ 22 - 100 Hz
- Air Flow: Side inlet to back forced air