ATSC 3.0 to TS
Multi-Channel Transcoder

TXS 3800

With the new ATSC 3.0 broadcast standard breaking compatibility with traditional broadcast transport streams, the need convert these signals to support retransmission on existing cable, IPTV and satellite systems is set to grow rapidly.

Sencore's new TXS 3800 is a robust and reliable multi-channel 1RU ATSC 3.0 to Transport Stream transcoder that is ideally suited to help MVPDs convert ATSC 3.0 to the formats and video/audio CODECs they need for their existing distribution systems.

The TXS 3800 includes both an ATSC 3.0 RF input for receiving directly off-air or an IP input for receiving the new-format streams from an external demodulator. These streams are then repackaged into transport streams and the video and audio are transcoded into compatible CODECs, resolutions and formats. Additionally, the main caption services are transcoded back into 708/608. The converted streams are then output as IP multicasts or unicasts for distribution. The powerful and high-quality transcoder in the TXS 3800 can transcode and repackage up to four programs/services.

Unit configuration is done using the intuitive web GUI or through an automation system utilizing the SNMP or web-services API.

Applications

- ATSC 3.0 Retransmission
  Receiving RF or IP ATSC 3.0 signals and converting them to stream formats necessary for retransmission on existing cable, IPTV and satellite distribution systems.
- Video and Audio Transcoding
  Converting HEVC video and AC-4 audio to other formats such as H.264/MPEG-2 video and AC-3, AAC and MPEG audio.

SPECIFICATIONS

INPUTS

Input Type:	ATSC 3.0 via RF and/or IP
RF Connector Type:	75ohm F Connector
RF Frequency Range:	42 to 870 MHz
RF Sensitivity:	-20 to 30 dBmV
IP Connector Type:	RJ45 10/100/1000
IP Input Streams:	Up to 2 Receives per Transcoder
Container Formats:	MPEG-DASH via ROUTE

TRANSCODER

Input Video CODECs:	HEVC/H.265, H.264
Input Video Resolution:	Up to UHD
Input Audio CODECs:	AC-4, AC-3, AAC or MPEG
Video Transcode Capacity:	Up to 4 Services/Programs
Audio Transcode Capacity:	2 Audio Services per Video Service
Closed Caption Transcode:	1 Caption Service per Video Service
Output Video CODECs:	H.264 or MPEG-2
Output Video:	Resolution Up to UHD
Output Audio CODECs:	AC-3, AAC or MPEG

OUTPUT

Connector Type:	RJ45 10/100/1000
Output Streams:	Up to 2 Transmits per Service
Stream Format:	MPEG Transport Stream via SMPTE 2022-2
Addressing:	Unicast or Multicast

MANAGEMENT

Connector:	RJ45 10/100/1000
User Interface:	Web GUI
Automation Interfaces:	SNMP Status/Control/Traps REST Web-Services API

PHYSICAL

Chassis Size:	1RU, Rackmount. 20 in. Depth
Power Supply:	Dual, Redundant, Hot- Swappable 100-240V, 50-60Hz