TXS3800
ATSC 3.0 to TS Multi-Channel Transcoder

OVERVIEW

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 and an IP input for receiving the new-format streams. These streams are then repackaged into transport streams and the video and audio can be transcoded into compatible CODECs, resolutions and formats. 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 from the same RF channel.

Unit configuraiton is done using the intuitive web GUI, front panel, or through 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 4 Receives
Container Formats:	MPEG-DASH via ROUTE
	ISO BMFF via MMT

TRANSCODER

Input Video CODECs	HEVC/H.265, H.264
Input Video Resolution	Up to 4k
Input Audio CODECs	AC-4, AC-3, AAC or MPEG
Video Transcode Capacity:	Up to 4 Services/Programs
Audio Transcode Capacity:	4 Services per Video Service
Output Video CODECs	H.264, MPEG-2 or Pass-through HEVC/H.265
Output Video Resolution	Up to 1080P60 or Pass-through 4k
Output Audio CODECs	AC-3, AAC or MPEG or Pass-through AC-4

OUTPUT

Connector Type:	RJ45 10/100/1000
Output Streams:	Up to 16 Transmits
Stream Format:	MPEG Transport Stream via SMPTE 2022-2
Addressing:	Unicast or Multicast

MANAGEMENT

Connector:	RJ45 10/100
User Interfaces:	Web GUI or Front Panel
Automation Interfaces:	SNMP Status/Control/Traps REST Web-Services API