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TSM-2020

Transport Stream Management System

The Vislink Transport Stream Management System (TSM-2020) is used to collect, aggregate and distribute video captured from a single or multiple receive site application. The TSM-2020 extends critical situational video to an unlimited number of observers who can view the video over any network connection, including wired Ethernet, Wi-Fi, IP satellite and IP cellular. Video can be distributed over a secure IP network or the public internet.

The TSM-2020 is a scalable platform that addresses multiple requirements across a common hardware platform.

Single receiver and Viewer: In its basic configuration, the TSM-2020 controls a single receiver and displays video, audio and data on a large screen or web page.

Multiple Viewers: The TSM-2020 can be outfitted with an adaptive bitrate transcoding streaming engine, enabling viewing on multiple PC's, smart phones and tablets. This is ideal for streaming over wireless IP networks

Central Control

Aggregation

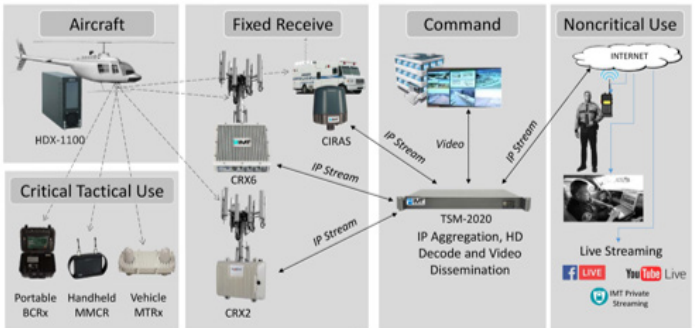
Viewing

Streaming

Key Features

- Local HD Decoder
- IP Aggregation
- Multi-user Streaming
- ABR—Adaptive Bitrate Transcoding
- Central control of remote receive sites management
- Share video over secure network
- Encrypted video
- Distribute over public internet
- Intuitive Webpage control
- 1RU Server
- Unlimited Users

Multiple Receivers and Viewers: For applications that require multiple receive sites across a city, county or state, the TSM-2020 functions as a central management system that ties all the receivers together, thus simplifying overall management of the system. The TSM-2020 enables active mobility across all the attached receivers seamlessly and autonomously.



Applications

- Airborne
- Surveillance
- Sport and Arena Coverage

Companion Products

- Vislink and Vislink Receivers*

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Technical Operation

The TSM-2020 controls and accepts video streams from Vislink's family of IP diversity receivers. Using the Vislink eLink Intelligent Aggregation Algorithm (IAA), the TSM-2020 automatically down selects to the best receivers and reconstructs an error-free IP stream. The TSM-2020 continuously monitors all connected remote receivers, coordinates all receiver channels and acts as a single point interface. Metadata received from each remote receiver enables the TSM-2020 to analyze and manage total system bandwidth and preselect the best signal.

The TSM-2020 uses the reconstructed stream to adaptively transcode the received video into various standard streaming formats, and distributes the video, audio and metadata to multiple viewing platforms. Viewing platforms can range from a single PC, smartphones and notepads connected over a cellular network, to an HD video wall. The TSM-2020 also features a local, native-resolution HD decoder with HDMI and SDI outputs for video monitoring.

The TSM-2020 accepts full-frame rate SD or HD video and properly scales the output video for the targeted viewing device and network conditions, ensuring unprecedented reliability. For example, when streaming to an iPhone over a 3G/4G/LTE cellular connection, the streaming video resolution is reduced to fit the iPhone resolution, and the encoding bit rate is reduced appropriate for a 3G/4G/LTE connection. This maximizes the user experience and produces significant value while limiting data usage.

The TSM-2020 supports the latest in delivery profiles including Apple® HLS, MPEG-DASH, Adobe® HDS and Microsoft® Smooth streaming, without requiring any proprietary software viewers.

SPECIFICATIONS

Hardware

- Physical:
  - Industrial 1RU 19" Case
- Voltage Input:
  - AC 100-270VDC
- Audio/Video Outputs:
  - HDMI
  - HD-SDI
  - DVI-D (factory use)
- USB:
  - 4 x USB 2.0
  - 8 x USB 3.0
- Ethernet:
  - Dual GigE
- Operating Temperature:
  - 0 - 55° C
- Size:
  - 1 x 19-inch rack unit

Stream View – Video Decoder

- Video:
  - H.264/AVC
  - VP9, VP8
  - MPEG2
- Audio:
  - MP3, ACC, MPEG 1
- Audio sample rate:
  - 48Khz
- Audio Output:
  - Embedded, SDI/HDMI

Video Media Server

Input Protocols:

- MPEG-TS
- RTSP/RTP
- Adobe RTMP
- SHOUTcast/Icecast

Trans-Size/Rate:

- 1080p/3Mbps
- 720p/2Mbps
- 480p/1Mbps
- 360p/900kbps
- 240p/400kbps
- 160p/<250kbps

Output Protocols:

- MPEG-TS
- RTSP/RTP
- Apple HLS
- Microsoft Smooth Streaming
- MPEG-DASH
- Adobe HDS
- Adobe RTMP

Communication & Control

- Interface:
  - Web page
  - Receive system
  - Monitoring and status
  - Receive Systems
  - Active Directory Integration
- Security:
  - Integrated User Management
- User Profiles:
  - Admin
  - User
  - Viewer
- Web page resolution:
  - (408 x 320p) no audio

Re-streaming

- The received TSoIP is available to be re-streamed to IP address of four destinations
- *eLink:
  - CIRAS x6 and x2
  - MicroLite
  - CRx6 and CRx2

For others supported, please contact us.

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learn more at **vislink.com**