MediaStar Multiscreen Transcoder (700-485)

Key Features for

- Transcodes multiple live MPEG2, H264 and HEVC IPTV streams to H264 or H265
- Enables Bitrate reduction per stream for data rate limiting on critical networks
- Allows dynamic downscaling of picture resolutions and frame rates from 4K to 480p
- Can convert from interlaced scan to progressive scan per stream
- Can convert Multicast streams to Unicast and vice versa
- Management with Web GUI or MediaStar MediaManager software
- 1RU 19" Rack mount format with dual redundant PSU support

The MediaStar 700-485 MultiStream Transcoder unit receives incoming IP streams and provides video and audio format transcoding, stream rate regulation and downscaling across multiple live IPTV streams to enable their controlled re-transmission on to an IP network

The transcoder acts as a reliable and secure interface between disparate incoming IP streams, often derived from multiple sources and with differing transmission standards. The units modify them, apply system controls and then restream them onto your network to conform to a predetermined corporate network policy or specific site specification.

Stream parameters which can be controlled and modified include re-encoding the incoming video and audio streams to H264 or H265 HEVC standards and engaging stream bit rate regulation to set both a target and maximum permitted network bandwidth to any outgoing stream, thus assuring data rate limiting on bandwidth critical networks.

Additionally, individual stream video image resolutions can be downscaled from 4K to 480p to suit display requirements and if in an interlaced format, converted to progressive scan. Outgoing streams can also be converted from Multicast to Unicast format and vice versa to suit ongoing re-transmission requirements.

Simultaneous transcode capacity per unit is typically between 3 to 40 channels dependent upon outgoing video encoding formats and bit rates selected (See specifications). The units are typically deployed with MediaStar LAN-Casters, where the source bandwidth and format is determined by the broadcaster and are particularly effective in reducing the bandwidth of DVB and ATSC transmissions as well as converting MPEG2 to the more efficient H264 / HEVC formats.

The management and initial configuration of the unit and each transcoder channel is easily performed via the built-in web server with its intuitive UI. Alternatively, multiple units within a system can be networked under the control of the MediaStar Media Manager software (Part 462). making the 700-485 transcoders ideally suited for both large scale distributed applications or simple single unit deployments.

Model options: 700-485

VIDELCO Europe Limited

Specifications

SYSTEM INPUTS & OUTPUTS

STREAM INPUT FORMATS

MPEG-2 Transport Stream (TS) transmitted as a UDP V2/V3 IGMP Multicast or Unicast network stream

MPEG2, H264, HEVC video formats SD to 4K resolutions

MPEG1 part II, AAC, Dolby audio formats

OUTPUT ENCODING AND RESOLUTIONS

Simultaneous transcode maximum 3 to 40 channels, subject to outgoing video encoding format (26 channels 720p60 H264 or 3 channels 4Kp60 H265 typical)

MPEG-2 Transport Stream (TS) transmitted as a UDP V2/V3 IGMP Multicast or Unicast network stream

H264 video encoding, 480p to 1080p60 resolution

H265 HEVC video encoding, 480p to 4K resolution

AAC Audio encoding 32 - 384 Kbps, Dolby digital data pass-through

G.711 Audio encoding 64Kbps

VBR encoding (500 Kbps to 25 Mbps) with maximum bit rate control per channel

LAN AND PLATFORM

LAN

Dual 100/1000 Base-T 802.3 Auto MDIX aggregated LAN Interfaces
DHCP or Static IP addressing

PLATFORM

Linux OS, LTS Kernel

Xeon platform with Nvidia GPU

2 x USB 2 Ports

16GB RAM, 240GB SSD hard drive

Power: Dual redundant PSU, 55W to 145W, 110 - 240VAC

Temperature: 0 - 40 C, Non-condensing

Weight: 5.9 Kg

Dimensions: 1RU 19" Rack mount chassis, H1.7" (43mm) W17.2" (437mm) D35.2" (894mm)

Approvals: UL, CE, FCC

SYSTEM MANAGEMENT

Web page interface for easy system configuration

Can operate stand-alone or integrated with Media Manager system Administration software

SNMP Traps for alert conditions (incoming stream errors or stream not present)

Whats in the box;

700-485 TRANSCODER APPLIANCE UNIT WITH PRE-INSTALLED
TRANSCODER SOFTWARE; QUICK START GUIDE; 2 x AC POWER CORD

861311903