MediaStar MultiStream Transcoder (700-485)

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



Key Features

- 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

Models

• 700-485

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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 20 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.



Specifications

WHATS IN THE BOX	. 700-482 Transcoder appliance unit with pre-installed transcoder software . AC Power cord
SYSTEM INPUTS & OUTPUTS	Stream Input Formats • Unicast or multicast UDP MPEG2 transport streams • MPEG2, H264 or H265 video formats • MPEG, AAC or digitally encoded audio
	Output Encoding and Resolutions • Unicast or multicast UDP MPEG2 transport streams (TTL = 16) • H264 or H265 video formats (1 – 10 Mbps ABR) • AAC stereo audio (48-192 kbps) • G711 (64 Kbps) RTP unicast or multicast streams with TV picture audio, with up to 10000mS synchronisation delay
	Stream Handling Capacity • Simultaneous transcoding of 20 IPTV streams, including video & audio format conversion, picture resolution conversion and simultaneous output of separate G711 audio streams • Video resolution conversion from 480p to 1080p resolutions
LAN AND PLATFORM	LAN • RJ45 802.3 100/1000/1000 Base-T Auto MDIX • IPv4, IPv6, DHCP or Static IP addressing
	Platform • Dual Intel Xeon Bronze Processor, 16 GB RAM 240 GB SSD • Linux OS V4.19 LTS. • Integration with Media Manager software or standalone operation • Web page interface for easy system configuration
	Physical • 1RU Rack mounting full rack depth, 437 x 43 x 894 mm, 17.2" x 1.6" x 35.2" • Weight 16 Kg, 35.2 Lbs.
	Environmental • 0°C to 40°C, 32°F - 104°F (enclosure ambient)
	Power100–240 VAC, 50–60Hz, 12.5–9.8A, 2000W Hot swappable Dual Redundant PSUs
	USB & VGA Port 2 off USB 3.0 host ports used for keyboard/Mouse Monitor connection for local terminal session.
	Approvals FCC, CE, CSA (UL) Approved
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)

