

OMP500

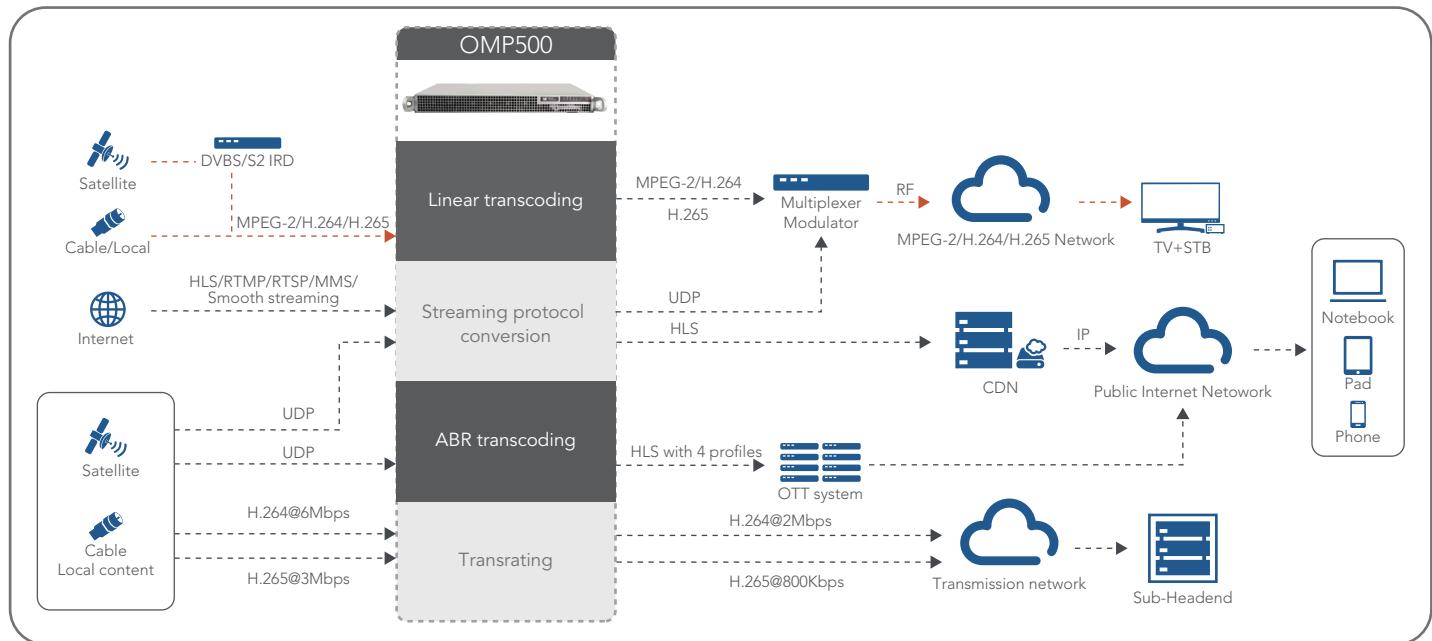


Multi-channel Linear Transcoder with optional OTT Packaging



OMP500 is the software based multi-channel transcoder platform that supports both linear and OTT transcoding which allows to integrate different video format between networks and enable content streaming over public internet or via mobile network. Featured by B frame and de-interlacing, it can also transcode video between progressive and interlaced format seamlessly in high quality while low bandwidth. With UDP/RTP/HLS/RTSP and more IP protocol options the OMP500 can fit into any architecture to enable OTT delivery in your system. With three available models to choose from the OMP500 can enable OTT services on any budget. Ranging from a budget friendly entry level system for one OTT service to the highest performance model capable of providing up to forty OTT services.

APPLICATION



1. Convert MPEG-2/H.264/H.265 input into MPEG-2/H.264/H.265* output for compatibility with different networks
2. Scale video resolutions and change frame-rates to accommodate HD or SD system requirements
3. Receive OTT sources over the public internet as Unicast, HLS, or RTMP and convert to traditional multicast UDP/RTP IPTV signal type
4. Transcode and package up to four adaptive bit-rate (H.264) profiles for traditional OTT uplink into Origin Server or Content Delivery Network (CDN)
5. Reduce bandwidth by changing codecs and resolution (commonly known as “rate-shaping” or “trans-rating”)

*H.265 output is supported only on QMP500-01B and QMP500-02.

HIGHLIGHTS

- Supports previewing input video and detailed service analysis
- Interlace and deinterlace options, advanced de-jitter and denoise for best video/audio quality
- Logo/Graphic insertion, text overlay (licensed feature) and auxiliary data processing such as Closed Caption, Teletext and DVB subtitles
- Supports input channel, port level and system level redundancy
- Flexible and future proof, support new features by software/license upgrade
- Provides management with easy to use web interface and SNMP protocol

TECHNICAL SPECIFICATION

Input	
Interface	RJ45 (GbE Port)
Protocols	UDP, RTP, HLS, RTMP, RTSP, MMS, TCP, FLV, Smooth streaming
Video Codecs	MPEG-2 MP@ML/HL H.264 MP@L1.2/2.2/3.0/3.1, HP@L3.1/4.0/4.1 H.265 MP@L2.0/2.1/3.0/3.1/4.0/4.1, HP@L4.0/4.1/5.0/5.1/5.2/6.0/6.1/6.2
Video Resolutions	HD: 1920*1080p @60/59.94/50/30/29.97/25fps 1920*1080i @30/29.97/25fps 1280*720p @60/59.94/50/30/29.97/25fps SD: 720*576p @50/25fps 720*576i @25fps 720*480p @60/30/29.97fps 720*480i @30/29.97fps
Audio Codecs	MPEG1L2, HE-AAC (v1/v2), AAC-LC, AC3 (optional), E-AC3 (optional)

Output	
Interface	RJ45 (GbE Port)
Protocols	HLS, RTMP, HDS, Smooth Streaming, MPEG-DASH, RTSP, FLV, MMS
Video Codecs	MPEG-2 MP@HL/ML H.264 MP@L1.2/2.2/3.0/3.1, HP@L3.1/4.0/4.1 H.265*MP@L2.0/2.1/3.0/3.1/4.0/4.1, HP@L4.0/4.1/5.0/5.1/5.2/6.0/6.1/6.2
Video Resolutions	HD: 1920*1080p @60/59.94/50/30/29.97/25fps 1920*1080i @30/29.97/25fps 1280*720p @60/59.94/50/30/29.97/25fps SD: 720*576p @50/25fps 720*576i @25fps 720*480p @60/30/29.97fps 720*480i @30/29.97fps And more resolutions
Bitrate Control	CBR, VBR, ABR
Video Bitrate	100Kbps~15Mbps (depending on combination of profile, level and resolution)
Audio codecs	MPEG1-LayerII, AAC-LC, HE-AAC (v1/v2) AC3 /E-AC3 (optional) Pass-through supported Up to 4 channels per video
DVB Subtitle	Support pass-through
Teletext	Support pass-through
Closed Caption	Support pass-through

*H.265 output is supported only on OMP500-01B and OMP500-02

Processing Capacity	
Entry Level system: OMP500-00A	
IPTV Mode	3 HD (up to 1080p60) or 12 SD H.264/MPEG-2 transcoding
OTT Mode	1 HD or 6 SD H.264/MPEG-2 transcoding with up to 4 profiles: HD: Profile 1: up to 1080p60 Profile 2: up to 720p60 Profile 3: up to 576p25 Profile 4: up to 480p25 SD: Profile 1: up to 576p25 Profile 2: up to 480p25 Profile 3: up to 360p25 Profile 4: up to 240p25
High Performance system: OMP500-01A	
IPTV Mode	10 HD (up to 1080p60) or 40 SD H.264/MPEG-2 transcoding
OTT Mode	5 HD or 20 SD H.264/MPEG-2 transcoding with up to 4 profiles: HD: Profile 1: up to 1080p60 Profile 2: up to 720p60 Profile 3: up to 576p25 Profile 4: up to 480p25 SD: Profile 1: up to 576p25 Profile 2: up to 480p25 Profile 3: up to 360p25 Profile 4: up to 240p25
High Performance H.265 transcoding system: OMP500-01B	
IPTV Mode	10 HD H.265 to HD H.264 transcoding or 5 HD H.265 up-transcoding
Ultra High performance system: OMP500-02	
IPTV Mode	20 HD or 80 SD H.264/MPEG-2 transcoding 10 HD or 40 SD H.264 to H.265 transcoding
OTT Mode	10 HD or 40 SD H.264/MPEG-2 ABR transcoding with up to 4 profiles HD: Profile 1: up to 1080p60 Profile 2: up to 720p60 Profile 3: up to 576p25 Profile 4: up to 480p25 SD: Profile 1: up to 576p25 Profile 2: up to 480p25 Profile 3: up to 360p25 Profile 4: up to 240p25

Physical & Environment	
Dimension (W x H x D)	OMP500-00A: 426mm x 43mm x 356mm (16.8" x 1.7" x 14") Package: 596mm x 175mm x 495mm (22.4" x 6.9" x 19.5")
	OMP500-01A: 437mm x 43mm x 650mm (17.2" x 1.7" x 25.6") Package: 597mm x 216mm x 856mm (23.5" x 8.5" x 33.7")
	OMP500-02: 437mm x 43mm x 777mm (17.20" x 1.69" x 30.59") Package: 610mm x 204mm x 1016mm (24.02" x 8.03" x 40")
Weight	OMP500-00A: 4.99 kg (11 lb) OMP500-01A: 11.43 kg (25.2 lb) OMP500-02: 16 kg (35.27lb)
Power	OMP500-00A: Single AC Power, 100V-240V/50-60HZ, Max 200W OMP500-01A: Dual AC Power, 100V-240V/50-60HZ, Max 400W OMP500-02: Dual AC Power, 100V-240V/50-60HZ, Max 520W
Operation temperature	5°C - 35°C (41°F - 95°F)
Storage temperature	-40°C - 70°C (-40°F - 158°F)

ORDER INFORMATION

Model	Description
OMP500-00A	Entry Level system supports 3 HD services or 12 SD services H.264/MPEG-2 linear transcoding, or 1 HD or 6 SD H.264/MPEG-2 ABR transcoding with 4 profiles
OMP500-01A	High Performance system supports up to 10 HD services or 40 SD services H.264/MPEG-2 linear transcoding, or 5 HD services or 20 SD services H.264/MPEG-2 ABR transcoding with 4 profiles
OMP500-01B	High Performance system supports up to 11 CH HEVC HD to H.264 HD linear transcoding, or 50 CH HEVC SD to MPEG2 SD linear transcoding, or 5 CH HD HEVC linear up-transcoding.
OMP500-02	Ultra High Performance system supports up to 20xHD or 80xSD H.264/MPEG-2 linear transcoding, or up to 10xHD or 40xSD HEVC linear transcoding, or 10xHD or 40xSD H.264/MPEG-2 ABR transcoding with 4 profiles.

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