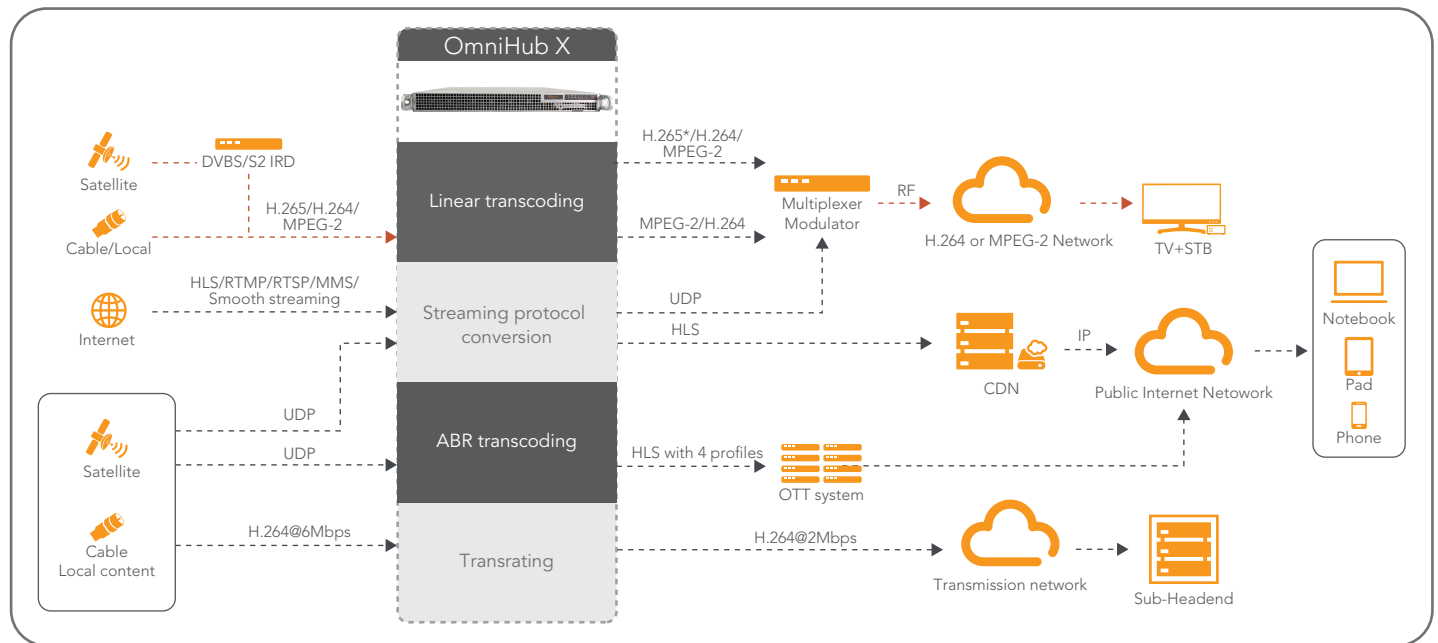




OmniHub X is the software based multi-channel transcoder platform that supports both linear and OTT transcoding which allows to integrate different video format between networks and enable content streaming over public internet or via mobile network. With UDP/RTP/HLS/RTSP and more IP protocol options the OmniHub X can fit into any architecture to enable OTT delivery in your system. With three available models to choose from the OmniHub X 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 twenty OTT services or multi-channel H.265 transcoding.

## APPLICATION



1. Convert H.265/H.264/MPEG-2 input into H.265\*/H.264/MPEG-2 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 OMNIHUB-X300 server

## 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 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      | H.264 MP@L1.2/2.2/3.0/3.1, HP@L3.1/4.0/4.1<br>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<br>MPEG-2 MP@ML/HL   |
| Video Resolutions | HD: 1920*1080p @60/59.94/50/30/29.97/25fps<br>1920*1080i @30/29.97/25fps<br>1280*720p @60/59.94/50/30/29.97/25fps<br>SD: 720*576p @50/25fps<br>720*576i @25fps<br>720*480p @60/30/29.97fps<br>720*480i @30/29.97fps |
| Audio Codecs      | MPEG1L2, HE-AAC (v1/v2), AAC-LC, AC3, E-AC3   |

| Output            |   |
|-------------------|---|
| Interface         | RJ45 (GbE Port)   |
| Protocols         | HLS, RTMP, HDS, Smooth Streaming, MPEG-DASH, RTSP, FLV, MMS   |
| Video Codecs      | H.264 MP@L1.2/2.2/3.0/3.1/3.2, HP@L3.1/4.0/4.1/4.2/5.0/5.1<br>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<br>MPEG-2 MP@HL/ML   |
| Video Resolutions | HD: 1920*1080p @60/59.94/50/30/29.97/25fps<br>1920*1080i @30/29.97/25fps<br>1280*720p @60/59.94/50/30/29.97/25fps<br>SD: 720*576p @50/25fps<br>720*576i @25fps<br>720*480p @60/30/29.97fps<br>720*480i @30/29.97fps<br>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)<br>AC3 /E-AC3<br>Pass-through supported<br>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 OMNIHUB-X300 server

## TECHNICAL SPECIFICATION

| Processing Capacity                                     |  |
|---|--|
| Entry Level system: OMNIHUB-X100                        |  |
| 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:<br>HD:<br>Profile 1: up to 1080p60      Profile 2: up to 720p60<br>Profile 3: up to 576p30      Profile 4: up to 480p30<br>SD:<br>Profile 1: up to 576p30      Profile 2: up to 480p30<br>Profile 3: up to 360p30      Profile 4: up to 240p30  |
| Medium Performance system: OMNIHUB-X200                 |  |
| 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:<br>HD:<br>Profile 1: up to 1080p60      Profile 2: up to 720p60<br>Profile 3: up to 576p30      Profile 4: up to 480p30<br>SD:<br>Profile 1: up to 576p30      Profile 2: up to 480p30<br>Profile 3: up to 360p30      Profile 4: up to 240p30 |
| High performance H.265 transcoding system: OMNIHUB-X300 |  |
| IPTV Mode   | 10 H.265 HD to H.264 HD liner transcoding or 5 HD H.265 liner up-transcoding   |

| Physical & Environment |  |
|------------------------|--|
| Dimension ( W x H x D) | OMNIHUB-X100: 426mm x 43mm x 356mm<br>(16.8" x 1.7" x 14")<br>Package: 596mm x 175mm x 495mm<br>(22.4" x 6.9" x 19.5")   |
|                        | OMNIHUB-X200: 437mm x 43mm x 429mm<br>(17.2" x 1.7" x 16.9")<br>Package: 686mm x 203mm x 610mm<br>(27" x 8" x 24")       |
|                        | OMNIHUB-X300: 437mm x 43mm x 450mm<br>(17.2" x 1.7" x 17.7")<br>Package: 650mm x 250mm x 650mm<br>(25.6" x 9.8" x 25.6") |
| Weight                 | OMNIHUB-X100: 4.99 kg (11 lb )<br>OMNIHUB-X200: 11.43 kg (25.2 lb)<br>OMNIHUB-X300: 12.8kg (28.2 lb)                     |
| Power                  | OMNIHUB-X100: AC, 100V-240V/50-60HZ<br>MAX 200W<br>OMNIHUB-X200/X300: AC, 100V-240V/50-60HZ<br>MAX 400W                  |
| Operation temperature  | 5°C - 35°C (41°F - 95°F)   |
| Storage temperature    | -40°C - 70°C (-40°F - 158°F)   |

## ORDER INFORMATION

| Part Number  | Description  |
|--------------|--|
| OMNIHUB-X100 | 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                                |
| OMNIHUB-X200 | 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 |
| OMNIHUB-X300 | OmniHub X300 transcoding platform<br>10 CH H.265 HD to H.264 HD liner transcoding or 5 CH HD H.265 liner transcoding   |