Leverage Software-Based Edge Media Distribution Securely and Efficiently

Synamedia's Media Edge Gateway (MEG) is the industry's most comprehensive edge reception and processing platform. The software-centric, cloud-native integrated receiver decoder (IRD) performs all distribution and processing functions – from secure reception, through transcoding and decoding with grooming/multiplexing capabilities, to IP transport.

Scalable and efficient, the future-proof gateway leverages multiple deployment options, such as bare metal, container and full virtual, to keep your business agile. You can work in your environment of choice, including on-premises, public cloud and hybrid cloud, to control costs and simplify management. Integrate with Synamedia's PowerVu or third-party content protection solutions to secure your entire video network chain from distribution, through processing, to delivery.

Synamedia's Media Edge Gateway gives you the flexibility to cost-effectively create new application-specific gateways such as ATSC 3.0 receivers and SMPTE2110 output decoders. This paves the way for you to deliver innovative experiences that bring more value for your customers and new monetization opportunities for your business.

Key Functionalities

Premium cloud and on-premises distribution

- Leverages in-house-developed video/audio codecs at lowest bitrates to ensure outstanding delivery, video decoding and processing experiences
- Optimizes distribution bandwidth usage and cost with innovative codecs to carry out high-quality video decoding and transcoding
- Consolidates workflows to run multiple video applications across all screens efficiently and easily
- Deploys edge application either in cloud or on-premises with Synamedia's VN Cloud to increase flexibility

Flexible decoding and transcoding across single or multiple streams for greater control

Decoding

- Decodes up to four MPEG-2 advanced video coding (AVC) or HEVC video-encoded services, as well as outputs on SMPTE2110
- Simultaneously outputs up to full high definition (FHD) with future UHD support

Transcoding/Processing

- Targets applications requiring transcoding of multiple video services within single or multiple transport streams, including HEVC, AVC and AVC/MPEG-2
- Transcodes to ABR profiles for transport to CDN networks
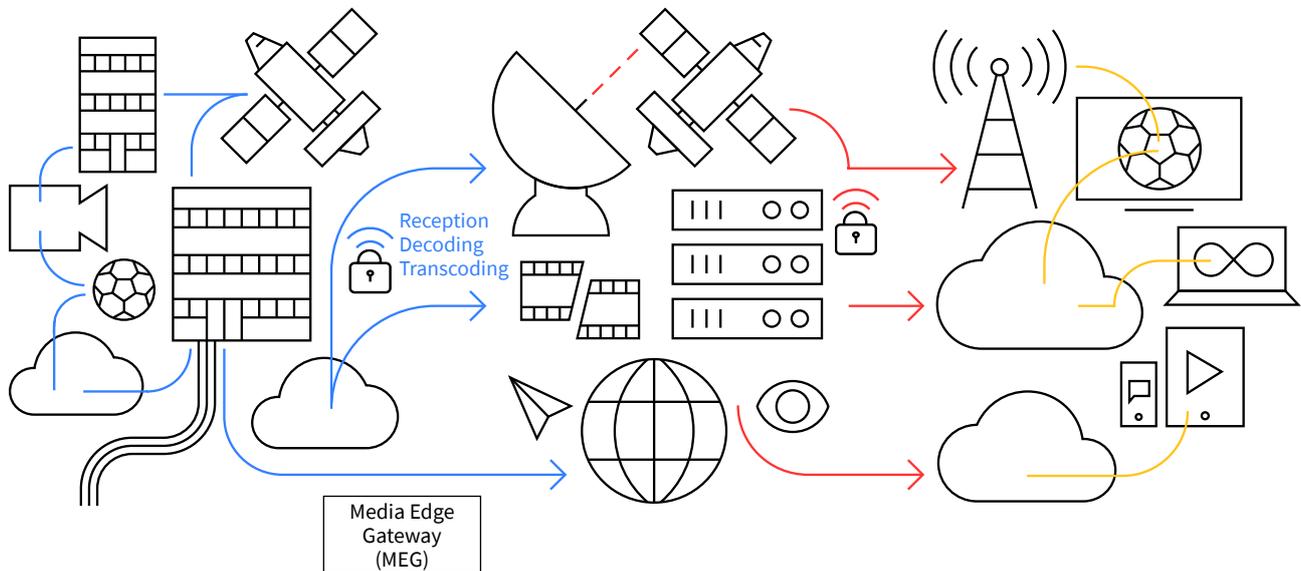- Offers advanced remultiplexing and PID management

Technical Advantages

- Flexible and pure software-based edge reception and processing capabilities for cloud and on-premises deployment
- Scalable, dense platform with MPEG-2, AVC and HEVC decoding support as well as high-density, HEVC and AVC transcoding support
- Extensive IP delivery support options, such as MPEGoIP with FEC, Zixi and SRT, including HLS with ABR2TS conversion
- SMPTE2110 output support for integration with all-IP production and playout solutions
- Future integration with Synamedia's PowerVu Network Center, including PowerVu Insight monitoring
- Future PowerVu and DVB-CI conditional access support

Software-centric application on a single converged platform

- Chooses from among multiple deployment models to drive your business agility without large capital investments
- Operates across your preferred work environment to control costs and simplify management
- Uses an intuitive drag-and-drop interface, rich APIs, flexible workflows and automation to slash new service time to market

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Video Network Chain

Reception
Decoding
Transcoding

Media Edge
Gateway
(MEG)

Distribution	Processing	Delivery

Product Specifications

Input Formats

• MPEG TS over IP
• Multiple program transport stream (MPTS) or single program transport stream (SPTS)
• SD, HD, full HD (FHD), and future ultra-HD (UHD) format support
• Unicast or multicast
• Adaptive transport stream (ATS) input for ABR-to-TS functionality
• Zixi and SRT support for reliable transport over Internet

Output Formats

• MPEG TS over IP
• MPTS or SPTS
• Live linear ABR support
  > ATS
  > Embedded packaging, including HLS and MPEG-DASH
• SD, HD and FHD, including down conversion support
• SMPTE2110-10/-20/-21/-30/-40 output support

Video Processing

• Supports up to 4 CH decodes to SMPTE2110 output
  > HEVC, AVC, MPEG-2
  > HD, FHD
  > SMPTE2110-10/-20/-21/-30/-40 output support
• Video transcoding option for HEVC, AVC inputs to AVC, MPEG-2 outputs for SD, HD, FHD, and UHD

Splicing and Switching

• Live linear broadcast splicing
• Linear stream switching

Redundancy

- 1:1 IP interface backup
- IP port mirroring
- Input service and transport stream redundancy
- Hitless merge for MPEG-2 transport stream input
- User-configurable triggers
- 1:1 and N:M MEG node redundancy

Monitoring and Management

- Integrated Grafana dashboards
- Elasticsearch, Logstash and Kibana (ELK) stack support
- Alarm notifications, including SNMP traps
- Syslog
- Easy-control local web GUI
- VSM support for lineup configuration, resource pool redundancy, capacity modeling, and centralized monitoring
- Fully documented open API enabling integration with third-party components

Ordering Information

Application	Part Number
Synamedia MEG Software Application: Order ITEM	R-MEG-APPS

Services & Support

Synamedia provides a broad portfolio of services and support to increase your network's business value and return on investment. We take a customer-centric approach, aligning our level of support to your technological requirements and network complexity. That way, you can successfully operate our products and solutions to ensure that you achieve optimal performance throughout your network's life cycle.

Warranty & Contact Information

Read our detailed warranty information.

Learn more about Synamedia's video network distribution solutions.

For more information, contact your account manager or contact us.

About Synamedia Video Network Distribution Solution

Synamedia offers a comprehensive distribution solution for content providers to securely deliver video to multichannel programming video distributors (MPVDs). Part of Synamedia's end-to-end video network portfolio, the solution is anchored by a converged platform enabling the distribution of linear channels via satellite and/or terrestrial networks. Our cost-effective solution leverages network control, reception and managerial capabilities to ensure the reliable delivery of premium quality video through flexible transmission options tailored to your working environment.