

PolyCaster NG-1

PolyCaster NG-2

PolyCaster NG-3

The PolyCaster NG series by GMIT offers optimized streaming servers for high-performance HTTP Live Streaming (HLS) to client devices.

PolyCaster is available as turn-key 19-inch rack mountable server appliance. PolyCaster supports HLS with standard-compliant audio/video formats (AVC/H.264 and AAC) but also non-standard-compliant combinations of audio/video formats (such as MPEG-2 Video and MPEG audio, or AVC/H.264 with Dolby Digital audio as received from DVB).

PolyCaster allows for securing live streams with HLS-AES encryption including key rotation. PolyCaster offers additional features, such as an IP filter (black-list/white-list) and a geographical IP filter for regional blocking of streams, an account filter (username and password), and a token-based authentication mechanism to secure access to streams.

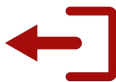
Application Areas

- Streaming server for live content Internet / Over-The-Top (OTT) streaming
- Optimized for high-performance HTTP Live Streaming (HLS)
- HLS-AES encryption including key rotation
- Adaptive Bitrate Streaming (ABR)



Input protocols

- MPEG-TS
 - Single Program Transport Stream (SPTS)
 - UDP unicast or multicast at multiple bitrates
 - HLS standard-compliant audio/video formats
 - Non-standard-compliant audio/video formats



Output protocols

- Apple® HTTP Live Streaming (HLS)
 - iPhone®, iPod®, iPad® (iOS 3.0 or later)
 - Android devices (with HLS support)
 - Set-top boxes (with HLS support)
 - QuickTime® Player (10.0 or later)
 - Safari® (4.0 or later on Mac OS X version 10.6)
 - Other HLS-compatible clients, such as HLS compatible browser players for Flash Player



Administration

- Linux system
- Responsive Web interface (http/https)
- ssh
- Free Software Developer Kit (SDK) for XML-RPC and PHP



Network and Streaming

- All models: Management
 - 1x 1000 BaseT Gigabit Ethernet
 - Up to 500 Mbit input streams
- PolyCaster NG-1
 - 1x 1000 BaseT Gigabit Ethernet Streaming
 - Up to 900 Mbit output streams / 1000 users
- PolyCaster NG-2
 - 2x 1000 BaseT Gigabit Ethernet Streaming
 - Up to 1800 Mbit output streams / 2000 users
- PolyCaster NG-3
 - 3x 1000 BaseT Gigabit Ethernet Streaming
 - Up to 2700 Mbit output streams / 3000 users



Authentication & security for streaming

- HLS-AES encryption including key rotation
- IP filter (black/white-list)
- Geographical filter (black/white-list)
- Account filter (user name/password)
- Token-based authentication mechanism



Hardware

- 1 U, 19" rack mountable
- 1x SSD (Hot swap carriers)
 - Option: Redundant disk array (RAID1, 2x SSD)
- VGA port, keyboard port, mouse port for KVM
- Height x Width x Depth
 - 43 mm (1.7") x 426 mm (16.8") x 495 mm (19.5")
- Voltage: 100V – 240V AC, 50-60 Hz
- Weight: 9 kg
- Power consumption:
 - < 6 W (standby), 40 W (idle) to 120 W (loaded)
 - Option: Redundant power supply
- High-quality server appliance assembled in Germany