

Inetsat Datasheet

Inetsat Video Server



Dimensions

- 1U rack mounted: 16.7(W)x16.2(D)x1.75(H) inches, 15lbs
- With packaging: 21.5(W)x21.5(D)x6.4(H) inches, 18lbs

Power

- AC input: 100/240 V, 50/ 60 Hz, 110W typ./270W max.

Input/Output ports

- Dual Gigabit Ethernet ports
- Dektec 2172 (2 ASI/HD-SDI ports+genlock) or DTA 2174b (4 ASI/HD-SDI ports+genlock)

Storage

- Up to 16 TB built in storage (for media cache and compliance recordings)

Playout

- Multiple feeds per server
- Multiple outputs per feed (HD, SD, 4K, custom resolutions, time shifted, HLS)
- Real-time down/up and frame rate conversion
- Auditing and Legal compliance recording with configurable resolution and bitrate stored in TS format (for download) or HLS format (for streaming)
- Full output and input TS recordings for configuration and troubleshooting
- Audio channel mapping
- Kantar/BARC and Nielsen audio watermarking for audience measurement
- Loudness normalization
- Audio upmixing/downmixing
- Audio description broadcast mix
- Customizable playback speed on primary and secondary events
- Output segment recordings scheduled by playlist or manually controlled by an operator
- Support for on-air status after a failover switch
- V-Chip/XDS support

TS output over ASI or IP

- IP transport over UDP, RTP (with or without FEC), SRT and Zixi
- ATSC or DVB TS mode
- H264, H265 or MPEG2 video
- AAC, MP1, MP2, PCM, Dolby® Digital, Dolby E and AAC-HE audio codecs
- US CC, Japan (ARIB) CC, DVB, Teletext, Imtext, SCTE27 and burned subtitles (with customizable font, size, colors, alignment, etc)

HLS stream output

- Multiple profiles with custom resolution/bitrate for adaptive bitrate support
- WebVTT and burned subtitles (with customizable font, size, colors, alignment, etc)
- Integration with any CDN in push or pull modes
- Youtube live integration

SDI output

- PCM, AC3 or EAC3 audio channels
- CC, OP47, OP42, ARIB STD-B37 & hard-burned subtitles

Secondary event graphics

- Multiple graphic engines (enables differentiated graphics on down/up - converted output)
- Multiple layer graphics
- Static images & animations
- Video over video with alpha channel support
- Voice-over
- Squeeze
- Dynamic text rendering and crawling
- Dynamic layouts (position and size in relation to other elements)
- 2D Animation
- Masking
- Clocks and countdown/up timers
- Custom fonts
- Audio fade effect
- Dynamic content parameters
- Support for external images via URLs

Splicing and Localization

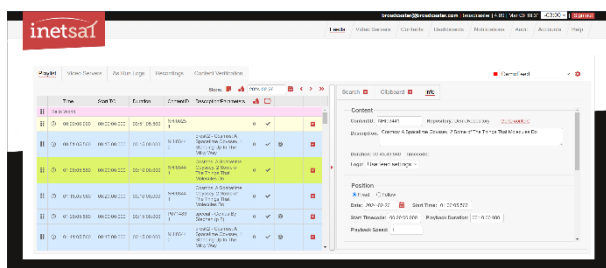
- SCTE-35, Teletext and DTMF cue tone trigger detection
- DVB and Teletext subtitle pass through
- Triggered secondary events
- Support for manual splicing by an operator
- Input to output transcoding
- Real-time graphics over pass through feed
- Dynamic playlist adjustment if live event went overtime
- Advanced dashboard tools to control the playlist
- SCTE-104, SCTE-35 and teletext trigger generation
- Trigger pass through
- Use one input for multiple feeds/channels
- Dynamically switch between multiple input configurations via secondary events or dashboard (Q2 2024)

Media

- MP4, MP2, MXF, GXF, MOV & TS video files
- H264, H265, MPEG2 (including XDCAM, HDCAM) & ProRes (Q2 2024) video codecs
- PCM, AAC, Dolby Digital, Dolby E, MP1 & MP2 audio codecs
- EBU-STL, PAC, SoftNI, 890, CHK, ASS, SRT, TTML, IMSC, SCC subtitle files

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Inetsat Platform



Playlist control

- Automated operation of multiple video servers per feed
- Independent configuration of output specs (port, codec, bitrate, PIDs, etc.) per video server
- Import playlist in any format (Inetsat's format or custom such as BXF, Miranda, Neptune, Harris, Pharos, eLog, etc.)
- Playlist management
- Playlist clipboard (Q2 2024)
- Drag and drop playlist items (Q2 2024)
- Customizable playlist colors per content type
- Playlist timers
- Playlist notes (Q2 2024)
- Customizable playlist columns (Q2 2024)
- Fixed and follow playlist items (Q2 2024)
- Playlist and media consistency checks with customizable warnings
- Backup content and playlist loop configuration
- Web service API for automated management

Live events

- Fixed or variable duration live events
- Switching can be controlled by a combination of playlist schedule, embedded triggers and manual operation
- Playlist metadata to indicate trigger targets where to return from live and items that might be skipped if running behind schedule after live event
- Dashboard with low latency monitoring, playlist in real time and buttons to control live switching
- Input recordings to delay or replay live events
- Segment recordings to generate new assets from the playout output with clean or differentiated graphics controlled by playlist or manually by an operator

Monitoring and Custom Dashboards

- Customizable multiview monitoring dashboard
- Different widgets including HLS streams and thumbnails with audio levels, playlist, as run, subtitles, timers, videosever status
- Control and preview real time secondary events
- Customizable buttons to control the video server, switching from/to playlist, shifting the playlist
- Support for local access to video servers for low latency monitoring and control
- Hardware and performance metrics monitoring including CPU, temperature, Video server memory and handles usage and video gaps (Q2 2024)

User access and security policies

- User groups with custom access permissions
- Two-factor authentication
- Password complexity policy
- Block inactive users
- IP restrictions (global and per user)
- Users can access multiple broadcaster environments
- Support for single sign-on authentication through external identity providers (Q2 2024)

Content distribution and media asset management

- Advanced encryption using AES 256 and RSA 4096
- Content repositories in the cloud or on premise (any S3 or WebDAV compatible storage)
- Multiple files per content (embedded or separate audio and subtitle files)
- Advanced content search with multiple filters
- Automatic content deletion rules can be configured per repository and per content type
- Content verification feature to assist operators with the manual QC process of unverified content
- Automatic download to video servers prioritized according to the playlist
- Media replication between primary and backup servers over LAN
- Content and metadata management
- Automatic storage management on video servers
- Missing media detection and automated email reports
- Custom content types

Media Uploader application

- High speed uploads using multiple simultaneous connections
- Built-in QC to detect possible corruptions
- Metadata extraction and validation
- Automated media upload workflow through watch folders
- Override metadata and import segmentation information through sidecar files (Q2 2024)
- Automatic language validation of subtitle files using cloud AI

Media Downloader application

- High speed downloads using multiple simultaneous connections
- Automatic media decryption

Alerts and Reports

- Alerts on server status including hardware, power or connectivity problems
- Alerts on black or frozen output
- Alerts on no input signal
- Preemptive alerts on playlist or media distribution problems
- Alerts when there are multiple unsuccessful login attempts
- Alerts on media upload and QC problems
- Alerts on hardware and performance metrics outside the expected ranges (Q2 2024)
- Alerts can be sent by email or posted to a Slack channel
- Reports on As Run logs
- Reports on Audit logs
- Reports on Missing media

Auditing and legal compliance recordings

- As run logs that can be exported in Inetsat's format or custom format
- Export consolidated as run logs based on which server was on air (Q2 2024)
- As run log viewer with search and filters on Inetsat's Management Console (Q2 2024)
- Download TS format compliance recordings
- Stream HLS format compliance recordings

Template Builder design application

- Support for multiple image, animation, text, squeeze, clock/timer, video over video and audio voiceover elements
- Support for parameterized text and media
- Accurate preview with built-in video server engine
- Export and easily share preview video
- Timeline view