# mPORT Grand io

Overview

Elevate your content production with mPORT Grand io, a robust and versatile multi-format appliance optimized for live ingest and playout within an integrated media production ecosystem. This professional solution integrates seamlessly into your existing workflows, offering comprehensive support for 4K/UHD, FHD, IP Live, and NDI workflows to elevate the quality and impact of your content.

Experience a state-of-the-art solution that enhances your media production processes, delivering unmatched flexibility, reliability, and efficiency. mPORT Grand io streamlines your operations, ushering in a new era of multimedia excellence and transforming your content creation workflows.

It supports multiple simultaneous media operations such as recording, playout, live video streams, file previews, live switching, and intercom communication among users, enabling a dynamic and collaborative production environment.
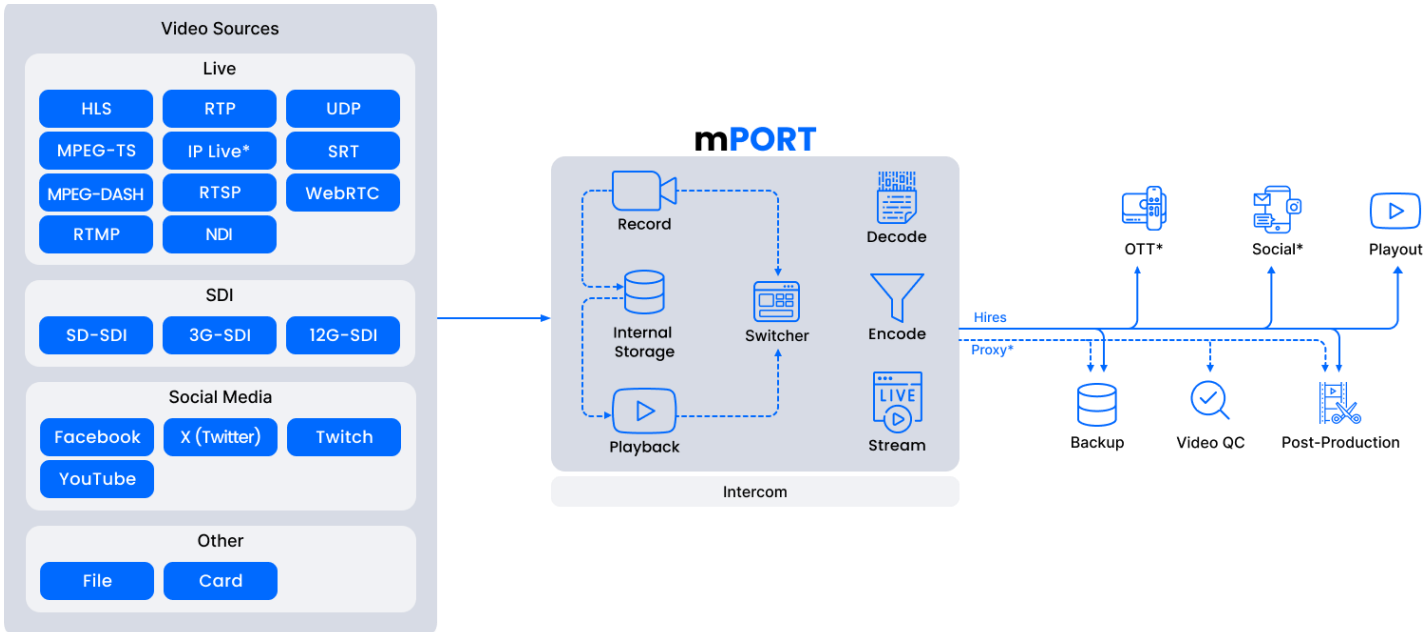
* Optional

Highlights

- **mSWITCH:** Remote live switching and composing
- Baseband ingest - multiple simultaneous recordings: multicamera recording, loop recording, crash recording, schedule recording, batch recording;
- Video server for multiple destinations of any storage, NAS, or SAN
- **Burnt-in options:** text, timecode, overlays (images and videos), and LUT
- **File playback:** multiple simultaneous operations: composition play, loop playback, instant play, schedule play, remote preview
- Encodes and/or decodes contents according to the destination format
- **Playlist management:** add clips, remove clips, reorder clips, export playlist, loop play
- Full featured local and remote user interface (includes quick control through touch screen)

- **mTALK:** Audio communication between users
- **Overlays:** clip-name and port-name
- Ideal for multiple feeds of video contribution
- Multi-configuration metadata management
- Flexible file naming engine
- Enable edit while ingest
- **Operation modes:** manual, scheduled, and automatic

Specially Designed For

- Educational/Government
- Live Entertainment/Worship
- Corporate
- Sports
- Film/TV Studio/Scripted

- Digitalization
- Post-Production
- Broadcast/Digital News
- OTT & Streaming
- System Integrators/Rentals

Features

Features
Timecode support
LTC (SMPTE 12M)
VITC (SMPTE RP188)
Time of Day
From VTR (BVW) - Serial
Multiple LIVE and simultaneous records
Crash Record operations
Gang Capture operations
Independent workflow selection in Gang Captures
Unique workflow for gang captures while using clipnaming with counters
Conceal/Hide option for unused Capture Instances
Synchronize (different) Gang Captures
Flexible Gang Capture channel configurations / Choose which channels are present in the gang
Frame Chase editing
Unlimited capture duration support
Loop record support
Extend a playlist's maximum duration in a Loop Record workflow
Perform Loop record captures through automatic jobs
Growing files support
Growing file support for Grass valley Edius Workgroup v.9 and X
Growing XDCAM MXF OP1a file support on Avid Media Composer ***required Nablet AMA Plugin**
Automatic Stream Control - Detect input streams and start recording automatically
Continuous recording support
Continuous live stream capture
Recording timer for captures
Abort or force stop a capture or a stream
Frame rate conversion option on Capture workflows
High Dynamic Range (HDR) support - HLG (arib std-b67) / PQ (SMPTE 2084)
High Frame Rate (HFR) up to 120fps (ST2081-10, ST2081-11, ST2082-10, ST2082-11 and ST2082-30)
Generate MP4 files as Fragmented MP4 via DCP Packager
Add XML sidecars with WAV file as output while recording
Perform "Run after completion" scripts
Remove source assets after Job completion for all plain sources
Live Probing option
Stream with Closed Captions
Edit a Workflow directly from the Player
Input selection made directly from a dropdown list on the player
Option to start timecode recording from 00:00:00:00
Export in "MOG playlist" format (.XML Sidecar containing information about the chunks of the recorded media)
Batch record support
Deck control through Serial Ports
Pre-roll and post-roll options
LiveU NewsML batch capture
LiveU NewsML metadata import
LiveU NewsML - support XML from devices (Live U, Android and iPhone)
LiveU include subfolder browse
Contribution Web Video Player - Aspect marker, Safe Area Marker, and Center marker
Player Overlay - Center Dot and Cross
Support for Active Format Description (AFD)
Medialoopster Integration in Capture operations
Medialoopster Integration in Batch Capture operations
Operation modes
Automatic
Manual
Scheduled
Clipnaming
Clipnaming based on Metadata Profiles
Field numeric representation of the day of the week
Drag and Drop support
Restore auto numbering on capture abort in naming templates

Features
"CreationDate" field can refer to a desired Time Zone
Add the label "_p" to proxy clips' names
Multi-Configuration metadata management and enrichment
Directly manage your assets metadata
Generate metadata directly through capture operations
Prevent the overwrite of metadata fields
Protect metadata fields
Delete custom metadata
Edit group clips metadata
Edit a file's source metadata based on a configured metadata profile
"Description" field editable in metadata widget
Set "Description" field as a column in the Asset Explorer list view
Forward metadata to Gang Captures
Favorite metadata fields
Create custom metadata fields
Add a "Rating" metadata field
Update the source metadata directly through the metadata widget
Add asset tags insertion in preset list
Re-use lists of possible values
Update Metadata in Media Central/Interplay using AMT-3 library
Rename media in Interplay after a capture has begun
Take field (counter)
Support for "Reel" metadata field using Apple ProRes Wrapper
Read metadata from pre-configured cloud storages (Amazon S3 / Google Cloud Storage / Tencent / IBM Cloud Object Storage)
Preserve specific Arri fields
Support IMF (Netflix Compliant) output metadata
Find immediately and learn everything about any asset
Show or hide proxies on Asset Browser
Sort, order and search for files on Asset Browser
Asset Explorer - Resizable thumbnails
Asset Explorer - Support asset availability
Search for all assets on Asset Explorer
Extract thumbnails and posters while indexing on Asset Explorer
Asset Explorer - Playable thumbnails
Preview media with interactive Pop-up Players
Asset Explorer - View the exact duration of files with more than 24 hours
Asset Selection -View the total duration of the selected assets
Configure the asset's preview duration
Asset Selection - Add Numeric Input
Asset management Check-in
AVID AAF
AVID interplay
XML support
XSLT transformation - XML sidecar
Edit share flow
Vizzi OTT check in
Support for update on Vizzi OTT check-in
Audio support
PCM input and output support
Dolby E-AC-3, Dolby TrueHD, and DTS input support
Dolby-E Input and output support
DTS Coherent Acoustics (DCA)
Integration with Dante Audio Capture *Negotiated separately
PCM 96KHz support
Independent audio encoder for hires and proxy
Individually map your audio by output target
Record audio only streams
Playout audio only streams
Audio downmixing & upmixing
External audio files support (.WAV)
MPEG-4 Audio (M4A) audio format as output
Ability to mute proxy on the output

MOG mPORT

Features
Close captions
CEA/EIA - 608
Add sidecar - SubRip (SRT)
Add sidecar - Fragmented WebVTT
Add sidecar - ISMT/CMFT subtitles
Support DVB-S captions in streams
Support captioning for OTT (CMFT, SubRip, and WebVTT)
Stream with Closed Captions
Locators
Create locators with shortcut keys
Edit the locators' description
Insertion and viewing
Create and freely customize action fields
Insert comments in a marker's widget tab
Locators source in markers widget
Select multiple subcategories for a single locator
Order asset locators by timecode
Establish Absolute or Relative timecode for source locators
Enter Timecode without the need of entering colons
Eject locators using the player eject button
Support for locators with AMT captures
Send locators directly to Gang Captures
Send locators instantly to Playout
Preserve Metadata Enhancement locators created by an Automatic Job
Scheduler (Calendar View)
Schedule a Record operation
Schedule a Playout operation
Edit individual events
Allow editing of settings for each occurrence/repetition
Set the number of an event's repetitions
Check for collisions between events and repetitions
Placeholder when editing an occurrence name
Enable field event name as AVID Interplay clipname by default
Use pre-set naming templates
Send the assets to independent targets and multiple outputs
Establish a maximum capture duration
Configurable number of iterations when using maximum capture duration
Use AVID Interplay clip name as event name on crash record events
Pre-roll and post-roll options for scheduled events
Define events to be triggered on any day, on working days only or only on weekends
Set the Calendar Notion option to automatically adjust to daylight time
Edit the Start Time field after the first recording
Visualize scheduled events in a List View
Export activity events
Perform captures from a MOG S1000
Perform captures from an Airspeed 5000
Perform captures from a Softron Movie Recorder
Scheduler (Playout Grid View) - Unifies in a single rollout view all Playout activities *Optional
Grid View for Playout
Crash Playout directly from the Grid View
Loop a playlist
Schedule Clip Lists to be Played out
Adjust to a desired Time Zone
Ability to set a pre-determined number of repetitions
Trigger Playout events (Any day, On Working Days or only on Weekends)
Signal error detection and related recovery actions
Detect possible signal errors
Detect possible drop frames
Support for timecode breaks
Configurable capture resume methodology
Automatic streaming (headless) - Restart capture after stopping/crashing or rebooting

Features

Checksum media
- MD5 hash file
- MDL - Media hash list

Live to Live
- Delete artifacts on abort
- Vizzi OTT Live Output
- Multiple resolutions check-in
- Support Time of Day in input streams (RTMP, MPEG-TS, RTP, SRT, RTSP, HLS, LLDASH, MSS, MPEG-DASH, CMAF)
- Variable Frame Rate Input
- Support IGMPv3 multicast
- Add possibility to change the transport stream segments duration

  MPEG-TS Support
-   Capture of MPEG-Transport Streams
-   Support of MPEG-TS program IDs

  NDI
-   Native NDI output
-   NDI audio and video synchronized mechanism
-   NDI discovery mechanism
-   Capture multiple NDI sources
-   Time of day and embedded timecode options in NDI input

  RTMP
-   RTMP recording with absolute timecode
-   RTMP Push Mode in input and output
-   RTMP Pull Mode in input and output
-   Native RTMP listener capability
-   Multiple audio channels in RTMP Output
-   HEVC, VP9 and AV1 codec in enhanced RTMP/FLV

  SRT
-   Input modes: Caller, Listener, and Rendezvous
-   SRT listener mode as stream output
-   Output modes: Caller and Rendezvous
-   Stream ID support
-   Configurable latency settings
-   Configurable overhead bandwidth
-   Configurable passphrase
-   Monitoring input metrics

  WebRTC
-   h.264 Support
-   VP8 Support
-   VP9 Support

Burn-In Video options
- Graphic burn-in while recording
- Text (Position, Text color, Box Color, Font Size)
- Timecode (Position, Text color, Box Color, Font Size)
- Overlays support (images and videos positioning)
- LUT (Look-Up Table) - Save particular color grades as a template

File playback
- Simultaneous playback
- Composition play
- Instant play
- Gang Play
- Replay a group or an individual asset
- Loop playback
- Group Loop Playback
- Gridline (3x5) Overlay
- Remote preview
- Support for 10bit
- Synchronous SDI playback of multiple files
- Closed captions
- Cue mode
- Monitor - support HDR
- Option to add locators

Features
Play assets from cloud storages
Preview Editing Decision Lists
Preview Clip Lists
Playback - 8K UHD
Embedded VITC output support
Step multiple frames forward and backwards on SDI/gang playback
Timecode and metadata overlaying on SDI out
Support for growing assets in player
Support for spanned assets in player
Timecode only monitoring
Use of a contour shuttle to control an asset during playback
Playback duration showing the remaining time of the clip
Remove clips
Reorder clips
Export playlist
Create new playlists with the current assets selection
High Dynamic Range (HDR) support - HLG (arib std-b67) / PQ (SMPTE 2084)
High Frame Rate (HFR) up to 120fps (ST2081-10, ST2081-11, ST2082-10, ST2082-11 and ST2082-30)
Preview - Possibility to change the playback speed by multiplier factors
Read Metadata Timecode Package (Auto / Material Package / Source Package)

Playout

Playout Preparation

- Build playlists in a Playlist Builder widget
- Create multiple Playlists
- Allow configuring playout clip action while preparing the playlist
- Support visual separators for rPlayout playlists
- Drag and Drop clips to the player for media preparation
- Support insertion of Timecodes without separators ":" in the playlist builder
- Use both types of TC (Relative and Absolute) for Mark-ins and mark-out at playlist builder
- Trim clips to be included in the Playlist
- Editable timecodes of the in and out points
- Re-arrange clips order
- Duplicate Edit Decision Lists
- Export Edit Decision Lists

Playout Control

- Edit playlist on the fly and while playing
- Playlist countdown and clip countdown
- File and clip list progress bars
- Playout Capture streams through SDI and native window
- Print to tape
- Queue clip on the playlist
- Queue on first frame and last frame
- Queue on first frame the first clip of the playlist
- Bypass action for playout clips
- Pause Playlist
- Playout to stream
- Thumbnail preview of the current clip on the playlist and its remaining time until Playout of the next clip
- On Air - current loaded playlist name
- Loop a playlist
- Loop one or more assets in the playlist
- Drag and Drop Clip List entries in Playout Control
- Multi-channel playout capability
- Schedule Playout
- Choose between Playout Services available - rPlayerSDI or CasparCG
- Mini control bar for use with Playout Control
- Keyboard shortcuts for playout control and associated WEB player
- Autoplay option
- As Run Log's containing Date, Time, Clip name, Time Code In, and Time Code Out
- Prepare the Playout clip actions while preparing the playlist

Input/output social media *Optional

- Google Chrome Social-m Plugin
- Social-m - Add support for live stream capture

Features
Metadata in Chrome Social-m Plugin
Capture to Facebook Live
Stream to Facebook Live
Stream to Twitch Live
Capture to YouTube Live
File based YouTube Upload
Capture X (Twitter) Live
Stream to X (Twitter) Live
Upload to Vimeo
Metadata social annotation and enhancement

mTALK

Communicate via audio between two or more users
QR code implementation
WebApp (requires Android smartphone)
Toggle Mode

Analytics

Integrate with Google Analytics and Tag Manager
Enable or disable Analytics
Keep track of menu events
Receive video metrics
Keep track of Job Control widget's events
Keep track of Asset Explorer widget's events

Improved security

Support for Windows UAC
Support for HTTP/HTTPS Ingress
HTTPS (Hypertext Transfer Protocol Secure) for REST API
Secure login
User Impersonation
Token based authentication
Two-factor authentication
Remote services, system restart, and settings recovery features
Opt to "Keep me signed in"
Send a User Verification through email
Configurable password visibility in logs

Orchestration

Orchestration View for output workflows
Services Menu that eases Group and Cluser Configurarion while displaying running servicers per node

Hardware acceleration *If Hardware is installed or available

Intel QSV
Sony XAVC
Panasonic AVC-Ultra
Nvidia Nvenc

General Purpose IN/OUT

GPI triggers supported
GPO triggers supported

Additional Highlights

REST API - allows interaction with RESTful web services
Change Aspect Ratio (4:3 / 16:9 / 1.9:1 / 2:1 or use same as source)
Active Format Description (Option to Preserve, Discard or Override)
Notify user upon connection lost with the Server
Manage via web interface or REST APIs for integration with automation system
Configurable quality and target latency of the preview stream
Logging - Human readable information on Services logs
Logging - Add user information on flow actions
Logging - Structured Logging
Receive SMTP notifications via e-mail
Support an external Database
Microsoft Edge / Firefox / Safari and Chrome Support

Unified Interface User Experience

Configurable web interface access port
Embeddable Dashboards/Widgets
Web-Based Interface with video preview

Features
Dashboards based experience where users can create their own personalized view
Dashboards presets for ease-of-use deployment
Create your own custom dashboard templates
Import and Export Users' Dashboards
Associate a single dashboard to multiple users
LDAP user authentication
User profile management
Users permissions control
Widget based modular interface
Lock/Unlock widgets permission
Choose between multiple interface themes (Midnight, Carbon, Dark or High contrast theme)
Touch screen mode
Monitoring - Advanced metrics
Multi Language Support
User tour
Show/Hide player overlays
Notifications of required actions needed to resume a workflow
Monitor Grouped Servers' activity in a Group Activity Widget
Remove the "quick edit" button from the Job Control Widget
(Set Permissions to) Activate or Deactivate Settings of a Gang Capture widget
Multiviewer
Define the quality and target latency of the preview stream
Ability to control to up to 4 players in a single dashboard
Maintenance
Scheduler
Reboot host or group
Export database (backup) as a scheduled task
Export logs as a scheduled task
Activity
Export last activity
Export all activity
Export activity from a date range
Clear all activity
Logs
Export logs
Backup
Export full backup - A full backup will create an archive of all the files and configurations
Import full backup
Dashboards
Export dashboards from one user or all users
Import dashboards
Data
Clean data usage
Clean assets, flows and notifications
Perform a Factory Data Reset
Erase all data and reset the system
Force clear cache

Technical Specifications

Supported File Inputs

Inputs		
OnPrem	**Plain Files or Structures**	
	ARRI ALEXA Cameras	
	BlackMagic Cameras	
	RED Digital Cinema	
	Avid Files	
	Avid Media Files (standalone or Nexis/ISIS)	
	Avid Sequences (master clips and rendered sequences)	
	CANON DSLR 5D, 7D, C300, C100	
	Generic File Shares	

Inputs		
	GoPro Cards	
	IKEGAMI GFPAK	
	JVC (AVC HD models)	
	NextoDI NSB-25	
	Panasonic CX350 HEVC	
	Panasonic AU-EVA1 and GH5 Cameras	
	Multi Clip/Spanned XDCAM/XAVC/XDCAM-EX Structure	
	DJI (Camera Drones)	
	HLS Structures	
	MPEG-TS Structures	
	XAVC Structures	
	XDCAM EX:	
	Sony SxS (SBAC-UT100, SBAC-US10/20/30)	
	Sony XQD (MRW E-80, MRW E-90)	
	XDCAM HD	
	Sony XDCAM HD: Disc (PDW-U1, PDW-U2, PDW-U4)	
	Panasonic P2	
	AJ-PCD 2 / AJ-PCD 20/30/35 / AJ-MPD1	
	AU-XPD1E / AU-XPD3EJ	
OnPrem	**Network**	
	XDCAM Network	
	P2 Network	
	ARRI RAW Network	
	Ikegami Network	
	Storage	
	Avid ISIS / Nexis	
	Avid Unity™ MediaNetwork	
	DDP – Dynamic Drive Pool	
	Facilis TerraBlock	
	Harmonic MediaGrid	
	Editshare EFS	
	NAS / SAS (SMB 2.0 and 3.0)	
	Quantum StorNext	
	ScaleLogic NX2 & ZX NAS Storage	
	EMC Isilon	
	QNAP	
	Studio Network Solutions EVO	
	Oracle Storage	
	Netapp	
Cloud	**Social Media**	
	Facebook	
	X (Twitter)	
	Vimeo	
	YouTube	
	Professional Cloud Storages	
	Adobe Creative Cloud	
	Amazon S3 Glacier	
	Microsoft Azure Storage	
	Tencent	
	Lucidlink Cloud NAS	
	Google Cloud Storage	
	IBM Cloud Object Storage	
	Generic S3 storages	
	Consumer Cloud Storages	
	Apple I Cloud Drive	
	Dropbox	
	Google Drive	
	Microsoft One Drive	

Supported File Outputs

Outputs	
OnPrem	Avid ISIS / Nexis
	Avid Unity™ MediaNetwork
	DDP – Dynamic Drive Pool
	Facilis TerraBlock
	Harmonic MediaGrid
	Editshare EFS
	NAS / SAS (SMB 2.0 and 3.0)
	Quantum StorNext
	ScaleLogic NX2 & ZX NAS Storage
	EMC Isilon
	QNAP
	Studio Network Solutions EVO
	Oracle Storage
	Netapp
	FTP Servers (List on request)
	Generic File Shares
Cloud	**Consumer Cloud Storages**
	Apple I Cloud Drive
	Dropbox
	Google Drive
	Microsoft One Drive
	Multiple and Adaptive bitrates for the OTT *Optional
	Professional Cloud Storages
	Adobe Creative Cloud
	Amazon S3 Glacier
	Microsoft Azure Storage
	Tencent
	Lucidlink Cloud NAS
	Google Cloud Storage
	IBM Cloud Object Storage
	Generic S3 storages
	Social Media *Optional
	Facebook
	X (Twitter)
	Vimeo
	YouTube

Supported Live Inputs

Inputs	
Live	**SDI**
	SD-SDI (SMPTE 259M)
	3G-SDI (SMPTE 292M, SMPTE296M, SMPTE372M, SMPTE425M)
	12G-SDI (SMPTE ST-2081/SMPTE ST-2082, SMPTE/2108-1)
	12G-SDI (Quad-Link 3G-SDI)
	Support for 8, 10 and 12 bits
	Streams
	Video Content Hyperlinks
	HLS
	MPEG-TS
	MPEG-DASH
	RTMP (with support for HEVC / VP9 / AV1)
	RTP
	RTSP
	NewTek NDI
	UDP
	Haivision SRT
	WebRTC
	Zixi
	Audio
	Dante audio *Negotiated separately

Inputs		
Live	**Social Media**	
	Facebook	
	Twitch	
	X (Twitter)	
	YouTube	
	IP Live *Optional	
	ST2022-6, ST2022-7	
	ST2110-10, ST2110-20, ST2110-21, ST2110-30, ST2110-31, ST2110-40	
	ST2110 - NMOS IS-04 and IS-05 support	

Supported Live Outputs

Outputs	
Live	**SDI**
	SD-SDI (SMPTE 259M)
	3G-SDI (SMPTE 292M, SMPTE296M, SMPTE372M, SMPTE425M)
	12G-SDI UHD-SDI (SMPTE ST-2081/SMPTE ST-2082)
	12G-SDI (Quad-Link 3G-SDI)
	Support for 8, 10 and 12 bits
	Streams
	HLS
	Microsoft Smooth Streaming
	MPEG-DASH
	Low Latency Dash - LL-Dash
	NewTek NDI
	MPEG-TS
	RTMP (with support for HEVC / VP9 / AV1)
	RTP
	RTSP
	UDP
	Haivision SRT
	WebRTC
	Vizzi
	Live Output
	Social Media *Optional
	Facebook
	Twitch
	X (Twitter)
	YouTube
	Vimeo
	Multiple and Adaptive bitrates for the OTT *Optional
	IP Live *Optional
	ST2022-7
	ST2110-10, ST2110-20, ST2110-21, ST2110-30, ST2110-31
	ST2110-40

Formats

Input Formats

Input Video Formats
ARRI ARRIRAW
Digital Cinema Packages (DCP)
RED Digital Cinema
IMX 30/40/50 Mbps
MPEG2 LGOP 18/25/35 Mbps 4:2:0
MPEG2 LGOP 50/70 Mbps 4:2:2
MPEG2 LGOP 422 50 Mbps
MPEG2 LGOP 420 1440x1080 35 Mbps
MPEG2 LGOP 420 (FULL) 35 Mbps
DVCAM 25 Mbps
XAVC Intra 50 / 100 Mbps
XAVC Intra 300 / 300 VBR / 480 / 480 VBR Mbps
XAVC LGOP 25 / 35 / 50 Mbps

Input Video Formats
XAVC LGOP 60 / 100 / 140 / 150 / 200 Mbps
DVCPRO 25/50 Mbps / DVCPRO HD 100 Mbps
AVC-Intra 50/100 Mbps
AVC-Intra 200 Mbps
AVC-Intra 2K422
AVC-Intra 4K422
AVC Ultra (LGOP 6/12/25/50 Mbps)
DNxHD (SQ/HQ/HQX/LB)
DNxHR (SQ/HQ/HQX/LB)
H.264 2160p 35 - 68 Mbps High Profile
H.264 1440p 16 - 24 Mbps High Profile
H.264 1080p 8 - 12 Mbps High Profile
H.264 720p 5 - 7.5 Mbps High Profile
H.264 480p 2.5 - 4 Mbps High Profile
H.264 360p 1 - 1.5 Mbps High Profile
H.264 2160p 13 - 51 Mbps High Profile (Live)
H.264 1440p 6 - 18 Mbps High Profile (Live)
H.264 1080p 3 - 9 Mbps High Profile (Live)
H.264 720p 1.5 - 6 Mbps High Profile (Live)
H.264 480p 0.5 - 2.0 Mbps High Profile (Live)
H.264 360p 0.4 - 1.0 Mbps High Profile (Live)
H.264 240p 0.3 - 0.7 Mbps High Profile (Live)
H.264 L10 10 Mbps
H.264 MOG 1Mbps
H.265/HEVC 10 Mbps LGOP
H.265/HEVC 25 Mbps LGOP
H.265/HEVC 50 Mbps LGOP
H.265/HEVC 100 Mbps LGOP
H.265/HEVC 4K 25 Mbps LGOP
H.265/HEVC 4K 50 Mbps LGOP
H.265/HEVC 4:2:2 LGOP
H.265/HEVC 4K 4:2:2 LGOP
ProRes 422 (SQ/HQ/LT)
ProRes 4444
ProRes 4444XQ
JPEG 2000 (Full HD)
JPEG 2000 (4K)
Google® VP6 / VP7 / VP8 / VP9 (Full HD)
Google® VP9 (4K)
Uncompressed UYVY 422 / V210 / RGBA
AOMedia Video 1 (Full HD)
AOMedia Video 1 (4K)
IMF (JPEG 2000 @ Full HD)
IMF (JPEG 2000 @ 4K)

Output Formats

Output Video Formats
IMX 30/40/50 Mbps
MPEG2 LGOP 18/25/35 Mbps 4:2:0
MPEG2 LGOP 50/70 Mbps 4:2:2
MPEG2 LGOP 422 50 Mbps
MPEG2 LGOP 420 1440x1080 35 Mbps
MPEG2 LGOP 420 (FULL) 35 Mbps
DVCAM 25 Mbps
XAVC Intra 50 / 100 Mbps
XAVC Intra 300 / 300 VBR / 480 / 480 VBR Mbps
XAVC LGOP 25 / 35 / 50 Mbps
XAVC LGOP 60 / 100 / 140 / 150 / 200 Mbps
DVCPRO 25/50 Mbps / DVCPRO HD 100 Mbps
AVC-Intra 50/100 Mbps
AVC-Intra 200 Mbps

Output Video Formats

AVC-Intra 2K422

AVC-Intra 4K422

AVC Ultra (LGOP 6/12/25/50 Mbps)

DNxHD (SQ/HQ/HQX/LB)

DNxHR (SQ/HQ/HQX/LB)

H.264 2160p 35 - 68 Mbps High Profile

H.264 1440p 16 - 24 Mbps High Profile

H.264 1080p 8 - 12 Mbps High Profile

H.264 720p CBR - 6.5 Mbps High Profile

H.264 720p 5 - 7.5 Mbps High Profile

H.264 480p 2.5 - 4 Mbps High Profile

H.264 360p 1 - 1.5 Mbps High Profile

H.264 2160p 13 - 51 Mbps High Profile (Live)

H.264 1440p 6 - 18 Mbps High Profile (Live)

H.264 1080p 3 - 9 Mbps High Profile (Live)

H.264 720p 1.5 - 6 Mbps High Profile (Live)

H.264 480p 0.5 - 2.0 Mbps High Profile (Live)

H.264 360p 0.4 - 1.0 Mbps High Profile (Live)

H.264 240p 0.3 - 0.7 Mbps High Profile (Live)

H.264 1080p CBR 15 Mbps MAIN Profile

H.264 480p CBR 2.3 Mbps MAIN Profile

H.264 360p CBR MAIN Profile

H.264 432p CBR MAIN Profile

H.264 576p CBR MAIN Profile

H.264 720p CBR MAIN Profile

H.264 1080p CBR MAIN Profile

H.264 576p CBR - 3 Mbps MAIN Profile

H.264 720p CBR - 4 Mbps MAIN Profile

H.264 1080p CBR - 5Mbps MAIN Profile

H.264 15-30 Mbps MAIN Profile

H.264 L10 10 Mbps

H.264 WebRTC Baseline

H.265/HEVC LGOP 4:2:2

H.265/HEVC 10 Mbps LGOP

H.265/HEVC 25 Mbps LGOP

H.265/HEVC 50 Mbps LGOP

H.265/HEVC 100 Mbps LGOP

H.265/HEVC 4K 25 Mbps LGOP

H.265/HEVC 4K 50 Mbps LGOP

NDI HX H.264 - High Profile

NDI HX H.265 - High Profile

MPEG-5 EVC Main Profile

MPEG VVC/H266 Main Profile

ProRes 422 (SQ/HQ/LT)

ProRes 4444

ProRes 4444XQ

JPEG 2000 (Full HD)

JPEG 2000 (4K)

Google® VP6 / VP7 / VP8

IMF (JPEG 2000 @ Full HD)

IMF (JPEG 2000 @ 4K)

Proxy Formats *

Output Proxy Formats
XAVC LGOP 25 / 35 Mbps
AVC Ultra (LGOP 6/12/25 Mbps)
H.264 @ 500 Kbps Flash
H.264 @ 486p 1 / 1.5 Mbps Flash
H.264 360p @ 1.6 Mbps Flash
H.264 720 480p @ 8 / 10 Mbps Flash
H.264 720p @ 8 / 15 / 16 / 20 / 24 / 25 Mbps Flash
H.264 854 480p @ 8 / 10 Mbps Flash
H.264 960 540p @ 3 Mbps Flash
H.264 1080p @ 8 / 15 / 16 / 20 / 24 / 25 Mbps Flash
H.264 SD @ 4 / 8 / 15 / 20 / 25 Mbps
H.264 480p @ 0.5 - 2 Mbps High Profile (Live)
H.264 360p @ 0.4 - 1 Mbps High Profile (Live)
H.264 240p @ 0.3 - 0.7 Mbps High Profile (Live)
ProRes Proxy 1920x1080
ProRes Proxy 1280x720
ProRes Proxy 960x540
ProRes Proxy SD (16:9 Raster)
ProRes Proxy SD
MPEG-1 (layer 2) @ 1.5 Mbps
Avid MPEG-2 (SIF @ 2Mbps)
H.264 Interplay Web (SD, 800 Kbps, and 2 Mbps)
Sony Proxy AV (MPEG-4 Part-2) @1.5 Mbps

* Optional output

OTT Formats *

Output OTT Formats
H.264 2160p 35 - 68 Mbps High Profile
H.264 1440p 16 - 24 Mbps High Profile
H.264 1080p 8 - 12 Mbps High Profile
H.264 720p 5 - 7.5 Mbps High Profile
H.264 480p 2.5 - 4 Mbps High Profile
H.264 360p 1 - 1.5 Mbps High Profile
H.264 2160p 13 - 51 Mbps High Profile (Live)
H.264 1440p 6 - 18 Mbps High Profile (Live)
H.264 1080p 3 - 9 Mbps High Profile (Live)
H.264 720p 1.5 - 6 Mbps High Profile (Live)
H.264 480p 0.5 - 2.0 Mbps High Profile (Live)
H.264 360p 0.4 - 1.0 Mbps High Profile (Live)
H.264 240p 0.3 - 0.7 Mbps High Profile (Live)
H.264 360p CBR MAIN Profile
H.264 432p CBR MAIN Profile
H.264 576p CBR MAIN Profile
H.264 720p CBR MAIN Profile
H.264 1080p CBR MAIN Profile
H.264 576p CBR - 3 Mbps MAIN Profile
H.264 720p CBR - 4 Mbps MAIN Profile
H.264 1080p CBR - 5Mbps MAIN Profile
H.265/HEVC 10 Mbps LGOP
H.265/HEVC 25 Mbps LGOP
H.265/HEVC 50 Mbps LGOP
H.265/HEVC 100 Mbps LGOP
H.265/HEVC LGOP 4:2:2
Google® VP9 (Full HD)
Google® VP9 (4K)

* Optional output

Product Integrations

Editing Sytems	MAM / PAM / DAM	Stream	CDN's
Adobe Premiere Pro	CatDV MAM	Newtek NDI	Lumen
AVID Media Composer	CatDV PAM	Haivision SRT	Fastly
AVID Media Central UX	CatDV DAM	Zixi	Akamai Technologies
AVID Media Central Cloud UX	eMAM Media Asset Management	**Consumer Cloud Storages**	Microsoft Azure
Apple Final Cut Pro X	Telestream: Masstech	Dropbox	Cloudflare
Edius: Pro 8, Workgroup 9	AVID Interplay	Google Drive	Limelight Networks
BlackMagic: DaVinci Resolve Studio	AXLE MAM	Microsoft One Drive	Amazon CloudFront
Autodesk: Flame	Editshare Flow	Apple I Cloud Drive	BootstrapCDN
Storage	MOG Vizzi	**VTR Decks**	StackPath
AVID ISIS Storage	Medialoopster MAM	XDCAM HD: Disc (PDW 1500)	KeyCDN
AVID Nexis Storage	**Professional Cloud Storages**	XDCAM HD: Disc (PDW HD1500)	Rackspace
Avid Unity™ MediaNetwork	Adobe Creative Cloud	XDCAM HD: Disc (PDW F70)	Alibaba Cloud Content Delivery Service
Dynamic Drive Pool SAN Storage	Amazon EC2	XDCAM Station (XDS1000)	CacheFly
Facilis Terrablock	Amazon S3	**Cameras**	Verizon
Harmonic MediaGrid	Amazon S3 Glacier	Canon: DSLR 5D, DSLR 7D	**Hypervisers**
Quantum: Storenext	Microsoft Azure Storage	Canon: DSLR C100, C300	Microsoft HyperV
Scalelogic: NX2 & ZX NAS Storage	Microsoft Azure Virtual Machines	ARRI: Alexa XT (ARRIRAW)	VMWare ESX
Editshare EFS	Tencent: Cloud Storage	Panasonic AU-EVA1, GH5 Cameras	**Social Media *Optional**
EMC: Isilon	Lucidlink Cloud NAS	Panasonic CX350 HEVC	Facebook
QNAP	Google Cloud Storage	Panasonic PTZ Cameras	Twitch
Studio Network Solutions: EVO	IBM Cloud Object Storage	Ikegami Gfpack	X (Twitter)
Oracle Storage	Generic S3	JVC: AVC HD camera models	YouTube
Netapp	**Peripheral Devices**	LUMIX DC-S1H	Vimeo
Audio	Countour Shuttle Pro V2	NewTek PTZ3, PTZ3 UHD Camera	
Dante *Negotiated separately	Elgato Stream Deck	RED Digital Cinema	
		GOPRO	

Server Options

	Features		Specs
System	Platform		Dell R750
	GPU		2x Nvidia A2
	Video IO		4x DeckLink 8K Pro
	Operating System Drive		480GB RAID 1
	Operating System		Windows 10 Enterprise (LTSC)
Connectivity	Networking	1Gb Ethernet Port	2
		10Gb Ethernet Port SFP+	2
	Video	VGA Out	1
	USB	2.0	1
		3.0	1
	BNC 12G In		16
	Ref. In		4
	Power Requirements		Dual 1100W
Extended Connectivity	Peripheral Module**	LTC Input	1
		Audio Out	1
		Breakout Connector	1
	Breakout Cable**	RS422	4
		GPO branch with 4 outputs	1
		GPI branch with 4 inputs	1
Other	Dimensions & Weight		2RU, 772x482x86.8mm (D, W, H), ~40 kg
	Delivery Packaging		970x660x310mm (D, W, H), ~45Kg
	Temperature	Storage	−40°C to 65°C (−40°F to 149°F)
		Continuous Operation	10°C to 35°C (50°F to 95°F)
	What is Included	Power Cable	2x C13 to C14
		Other	Static rails for 2/4-post racks

** Not included by default

Concurrent Media Operations

With mPORT Grand io, it is possible to run different media operations simultaneously, thus guaranteeing a universe of distinct arrangements to meet the challenging media day-to-day activities.

Media operations include recording, ingest, playback, live video streams, file preview, live channel switching, and intercom.

It supports up to 16 media operations at the same time. Within this margin, you can combine the operations shown in the table below:

Concurrent Media Operations				
Record / Live Video Stream	Playback	File Preview	Live Switch	Intercom
Up to 16 live channels *	Up to 16 playback files *	Up to 5 files preview	Up to 1 operation	Up to 1 operation

* When using operations dependent on SDI video inputs and outputs, the physical limit of the video card ports must be respected. Thus, the sum of these operations cannot be greater than 16.

Product

Part Number	Product	Description
mtgrio	mPORT Grand io	Appliance for hybrid workflows of up to 16 combined media operations

Available Options

Choose from the products below to customize the mPORT Grand io according to your business rules.

Production Tool

Tool for asset management and workflow orchestration.
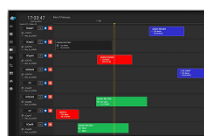
mPLAN

Setup scheduled events not only from the standard scheduler but through a unique roll out view interface. mPLAN is a tool that maintains a single rollout view of all scheduled events, allowing the management of the ingests process very efficiently. It manages multiple scheduled events across a variety of recording platforms in a multichannel environment using router control cross-points.

Part Number	Product	Description
mpla1c	mPLAN	Scheduler & Router Control per licensed channel

Note: *Adding optional features might affect the number of simultaneous operations.*

Add-ons

Output options to complement your workflows.

Part Number	Product	Description
grpa	Proxy generation	Simultaneous proxy creation
groa	OTT live ingest	Multiple output resolutions for OTT
grsa	Social media sharing	Simultaneous social media shares

Note: *Adding optional features might affect the number of simultaneous operations.*

Plugins

Complement any media production and distribution workflow with turnkey plugins and extensions.

Screen-m

Quickly capture and deliver your screen contents to your production environment.

Easily record your screen in its entirety or choose one of the open windows. You can even enable the capture of a microphone and the mouse cursor to make it easier to explain any presentation.

Part Number	Product	Description
scpi	Screen-m plugin	Screen capture & Delivery

Note: *Adding optional features might affect the number of simultaneous operations.*

Hardware

Customize your solution to your day-to-day media needs.

Part Number	Product	Description
pcbx	Peripheral mmodule	Optional MOG module to expand I/O available with 1x LTC, 1x audio output, 1x GPI, 1x GPO and 4x RS422
-	IP live card*	Add up to 4 UHD IP channels into your media production infrastructure

* Each Live IP card effectively replaces 8 SDI input/output channels. This offers the flexibility to opt for a hybrid appliance supporting both SDI and IP or, by integrating two Live IP cards, all current SDI inputs/outputs will be seamlessly transformed into IP-based connections.

Note: *Adding optional features might affect the number of simultaneous operations.*

Contact our sales team at sales@mog-technologies.com to find out how to purchase or in case you need more information.