

mPORT Grand io

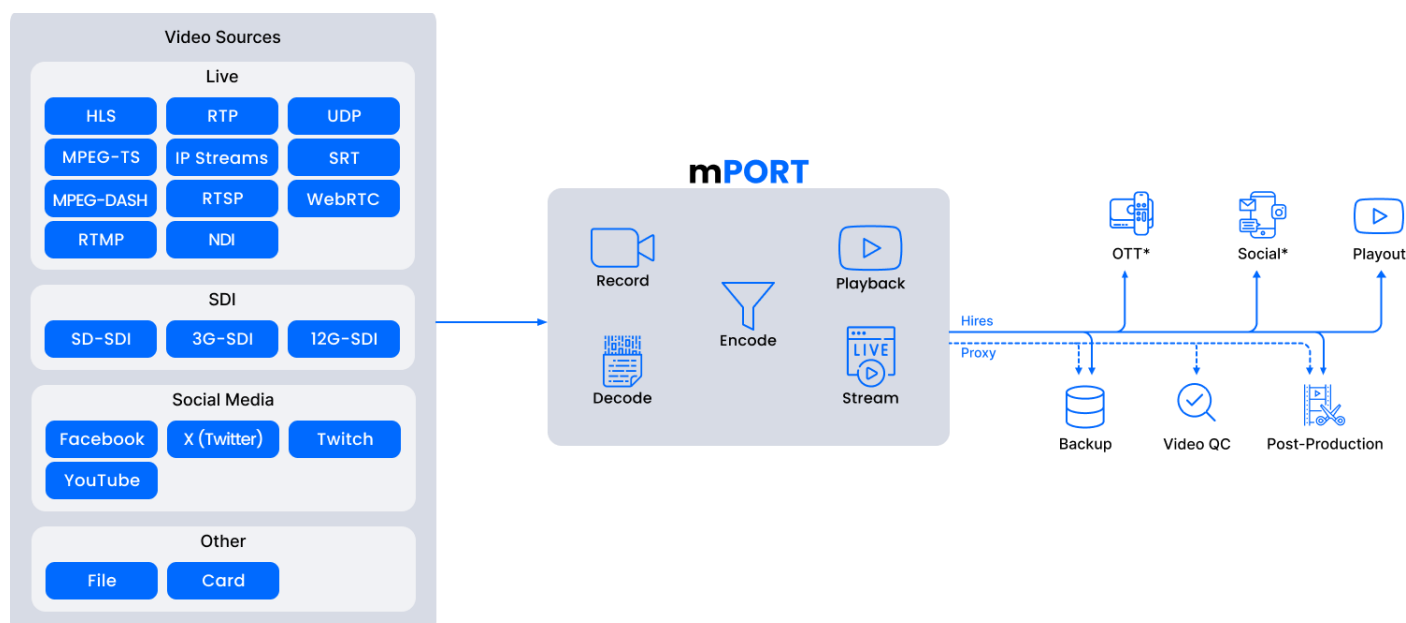


Overview

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 UHD, FHD, IP Stream, 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, and file previews, enabling a dynamic and collaborative production environment.



* Optional

Highlights

- 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)
- **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
- Proxy generation

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
Serial Control Protocols
VTR (BVW) - Serial
VTR (VDCP) - 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
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
Measurement of consumption (Number of bytes for input/output "lives")
Video Router Protocols
Quartz
Probel SW-P-08
Jupiter ASCII
Blackmagic Videohub Ethernet Protocol
Operation modes
Automatic
Manual
Scheduled

Features

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
- "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
- Reset 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

Features

Record audio only streams
 Payout 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

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 Payout
 Preserve Metadata Enhancement locators created by an Automatic Job

Scheduler (Calendar View)

Schedule a Record operation
 Schedule a Payout operation
 Schedule Gang Captures
 Schedule Playouts
 Schedule Maintenance Tasks (Reboot, Export Logs, Export Full Backup)
 Edit individual events
 Export activity 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
 Perform captures from an Airspeed 5000

Scheduler (Record Grid) - Unifies in a single rollout view all ingest activities *Optional

Schedule a Record operation
 Schedule Gang Captures
 Create new scheduled events directly from the timeline
 Perform crash record captures directly from the grid view
 Metadata Insertion availability
 Use of pre-set naming templates
 Edit scheduler individual events

Features

- Edit an event after it has started
- Edit settings for each occurrence/repetition
- Trigger Capture events (Any day, On Working Days or only on Weekends)
- Adjust events by dragging them on the timeline
- Check collision between events with repetitions
- On channel settings assign an Input a workflow a router source and a duration and start recording on the fly
- Change router source cross point from record scheduler during a live event
- Change router source on rollout
- Copy an event's name after it is complete
- Perform captures from an Airspeed 5000
- Pre-roll and post-roll options for scheduled events
- Configure the number of events repetitions
- Define events to be triggered on any day, working days or weekends only
- Set the Calendar Notion option to automatically adjust to daylight time
- Expandable and collapsible views
- Jump to date to seek events by day or in a 7 days period
- Choose between AVID or MOG color schemes
- Confirm a "Stop" action

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)

Router Control *Optional

- Support for Black Magic Video Router
- Support for Grass Valley Sirius Video Router
- Support for Evertz Quartz Video Router
- Support for Jupiter ASCII
- Change router points directly on the player
- Capacity to setup the number of sources and destinations
- Option to choose to make use or not of a source
- Assign a mnemonic to each source
- Ability to provide an alternative name to a router mnemonic
- Assign in the crosspoint tab a source to each router destination
- Lock sources to each router destination
- Configurable connection through IP or host mane to the destination router

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

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

Features

NDI discovery mechanism
 Capture multiple NDI sources
 Time of day and embedded timecode options in NDI input

HLS

Configurable HLS segment duration
 Configurable HLS Playlist segment count

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
 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

Features

- 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
- Seamless playback without black frames when "jump to" in a playlist

Input/output social media *Optional

- 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

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

Features

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

Database replication

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 Configuraron 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)

Protection against overwriting files

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

Unified GUI for all services and group of servers in the farm

Configurable web interface access port

Embeddable Dashboards/Widgets

Environment Dashboard which enables an overview of group servers in workgroups

Web-Based Interface with video preview

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

Features	
	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 8 players in a single dashboard
	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)
	Avid Sequences (master clips and rendered sequences)
	CANON DSLR 5D, 7D, C300, C100
	Generic File Shares
	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)

Inputs

OnPrem	Panasonic P2
	AJ-PCD 2 / AJ-PCD 20/30/35 / AJ-MPD1
	AU-XPDI1E / AU-XPDI3EJ
	Network
	XDCAM Network
	P2 Network
	ARRI RAW Network
	Ikegami Network
	Storage
	Avid 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 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

Outputs

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
	Social Media
	Facebook
	Twitch
	X (Twitter)
	YouTube

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
	HTTPS Push
	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

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
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

Input Video Formats

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
 Google® VP6 / VP7 / VP8 / VP9 (Full HD)
 Google® VP9 (4K)
 Uncompressed UYVY 422 / V210 / RGBA
 AOMedia Video 1 (Full HD)
 AOMedia Video 1 (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
 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 1080i 35 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)

Output Video Formats

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
Google® VP6 / VP7 / VP8

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

OTT Formats *

Output OTT Formats

H.264 2160p 35 - 68 Mbps High Profile
H.264 1440p 16 - 24 Mbps High Profile
H.264 1080i 35 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 and Workgroup 9 and 10	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 Nexis Storage	Medialoopster MAM	XDCAM HD: Disc (PDW 1500)	KeyCDN
Avid Unity™ MediaNetwork	Professional Cloud Storages	XDCAM HD: Disc (PDW HD1500)	Rackspace
Dynamic Drive Pool SAN Storage	Adobe Creative Cloud	XDCAM HD: Disc (PDW F70)	Alibaba Cloud Content Delivery Service
Facilis Terrablock	Amazon EC2	XDCAM Station (XDS1000)	CacheFly
Harmonic MediaGrid	Amazon S3	Cameras	Verizon
Quantum: Storenext	Amazon S3 Glacier	Canon: DSLR 5D, DSLR 7D	Social Media *Optional
Scalelogic: NX2 & ZX NAS Storage	Microsoft Azure Storage	Canon: DSLR C100, C300	Facebook
Editshare EFS	Microsoft Azure Virtual Machines	ARRI: Alexa XT (ARRIRAW)	Twitch
EMC: Isilon	Tencent: Cloud Storage	Panasonic AU-EVA1, GH5 Cameras	X (Twitter)
QNAP	Lucidlink Cloud NAS	Panasonic CX350 HEVC	YouTube
Studio Network Solutions: EVO	Google Cloud Storage	Panasonic PTZ Cameras	Vimeo
Oracle Storage	IBM Cloud Object Storage	Ikegami Gfpack	Video Router Control Protocols
Netapp	IBM Generic S3	JVC: AVC HD camera models	Videohub Ethernet Protocol
Audio	Peripheral Devices	LUMIX DC-S1H	Evertz > SONY HDS-X5800 - Evertz BRC controller (7700R-SC-BRC) (Quartz Protocol)
Dante *Negotiated separately	Countour Shuttle Pro V2	NewTek PTZ3, PTZ3 UHD Camera	Grass Valley > Trinx 5122 - CM4000 GrassValley Router Control (Jupiter ASCII protocol)
Hypervisors	Elgato Stream Deck	RED Digital Cinema	Grass Valley > Sirius 840 - Router Control module 2464 (Probel SW-P-08 Protocol)
Microsoft HyperV		GOPRO	
VMWare ESX			

Server Options

Features			Specs
System	Platform		Dell R760
	GPU		2x Nvidia A2
	Video IO		4x DeckLink 8K Pro
	Operating System Drive		2x 480GB RAID 1
	Operating System		Windows 10 Enterprise (LTSC)
Connectivity	Networking	1Gb Ethernet Port	2
		10Gb Ethernet Port SFP+	4
	Video	VGA Out	1
	USB	2.0	1
		3.0	1
	BNC 12G In		16
	Ref. In		4
Extended Connectivity	Power Requirements		Dual 4100W
	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, and file preview.

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
Up to 16 live channels	Up to 16 playback files	Up to 5 files preview

Note: 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
mgslsb	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
cnnsmap	Social media	Simultaneous social media shares
cnnottop	OTT	Multiple OTT output resolutions

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 module	Optional MOG module to expand I/O available with 1x LTC, 1x audio output, 1x GPI, 1x GPO and 4x RS422

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.

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