

## mDECK Grand rp

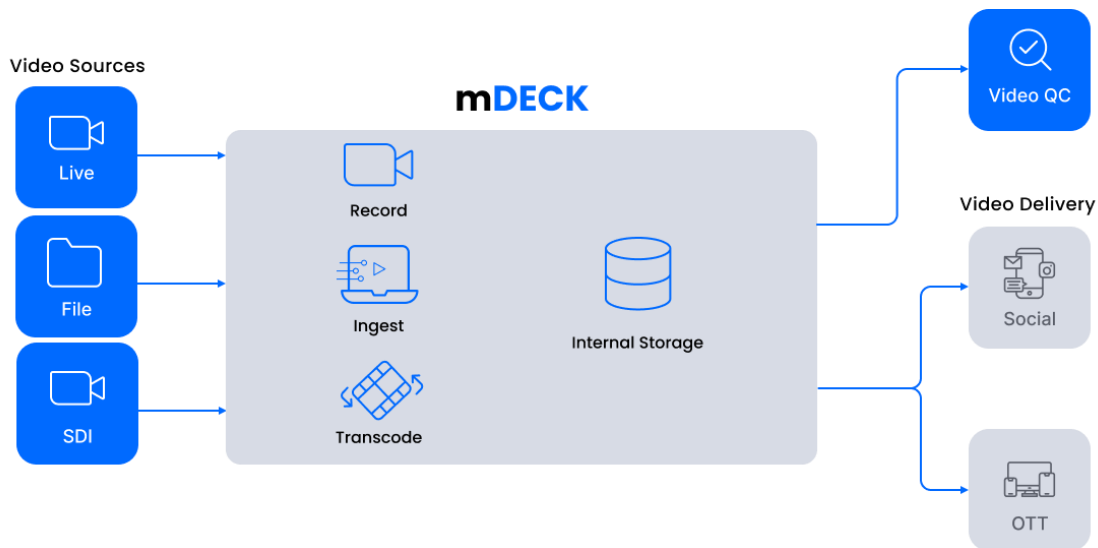


### Overview

Power up your workflow needs with mDECK Grand rp, a state-of-the-art ingest, storage, and PAM system, enhanced with AI capabilities and smart metadata technology that turns your team away from laborious tagging, cataloging, and searching tasks. mDECK Grand rp empowers creative teams by enabling them to work anywhere in a group of users to transform and manage their assets faster and at an accessible price.

It supports the combination of record, ingest, transcode, and playback operations in 4K, UHD, FHD, and NDI, guaranteeing a universe of distinct arrangements to suit the different activities of each day.

This powerful system comes with 128TB local storage, PSU redundancy, an OS drive, and can be pre-configured to support IP Live workflows.



### Highlights

- Disk-to-Disk storage manager (archive and restore)
- Live to file - multiple simultaneous records
- Multiple simultaneous transcodes
- Flexible file naming and renaming engine
- Metadata preservation, enhancement, and enrichment
- File playback - multiple simultaneous plays
- Proxy generation
- Multiple output resolutions for OTT
- Social media sharing
- Artificial intelligence

### Specially Designed For

- Educational/Government
- Live Entertainment/Worship
- Corporate
- Sports
- Digital News
- Archiving
- Post-Production
- Television/Broadcasting

## Features

Features
<b>Timecode support</b>
LTC (SMPTE 12M)
VITC (SMPTE RP188)
Time of Day
<b>Serial Control Protocols</b>
VTR (BVW) - Serial
VTR (VDCP) - Serial
<b>Multiple LIVE and simultaneous records</b>
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 <b>*required Nablet AMA Plugin</b>
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
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
<b>Video Router Protocols</b>
Quartz
Probel SW-P-08
Jupiter ASCII
Blackmagic Videohub Ethernet Protocol
<b>Operation modes</b>
Automatic
Manual
Scheduled

## Features

### Clipnaming

- Flexible file renaming engine
- Create diversified clipnaming templates
- Clipnaming based on Metadata Profiles
- Use of common labels (Id, label, Counter, Date, Original Source Name, Weekday, User)
- Field numeric representation of the day of the week
- Folder Structure creation
- 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

- An efficient internal asset management
- Quickly search for assets metadata
- 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
- Preserve RED digital cinema color information

### 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

## Features

- 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
- Loudness normalization (EBU R128)
- 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
- Scenarist (SCC)
- Add sidecar - SubRip (SRT)
- Add sidecar - Fragmented WebVTT
- Add sidecar - ISMT/CMFT subtitles
- DCP subtitle burn-in (.SCC)
- Digital Cinema Package (DCP) open captioning
- 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 and delete locators
- 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
- Merge locators
- 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 Automatic Jobs
- 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
- Ability to Ignore files before a start date
- 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

## Features

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 a MOG S1000

Perform captures from an Airspeed 5000

Perform captures from a Softron Movie Recorder

### 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)

Support Live Stream from sCapture as rPayout input

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 HX Support

NDI audio and video synchronized mechanism

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

### File ingest

Execute multiple simultaneous transcodes

Batch ingest

Card ingest

Clip merge

## Features

Clip renaming
Disable Clip File Naming generation
Partially restore clips
Rough cut
Establish priority levels
Pause File Based ingest operations
Insert Subclips SOM and EOM without colons
Automatic drag and drop ingest
Drag and drop media from several social networks
Generate XML sidecar with WAV file as output while ingest
Generate a .xml file for each output AVID clip or AVID sequence
Merge as Sequence from MP4 proxy files
Merge as sequence by sequence XML for MP4
Automatically select workflows available in job control attending the source files
Cut growing files and send them to (a playlist for) payout
Directly select the storage on the dashboard instead of accessing workflow profiles
Copy assets
Group resulting assets into a single one
Copy - Transfer sidecars if available
Encode the contents according to the destination format
Decode the contents according to the destination format
Move assets
Edit while transcoding/ingesting
Place locators on growing files
Multiple resolutions check-in
Frame rate conversion
Variable Frame Rate Input
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)
Ability to perform "Run after completion" scripts
Audio only OPAtom as output
Opt to not overwrite files
Support for .MOV files containing "Run-length encoding" video essence
Enable "growing" support on EDL ingest workflow
Timecode SUM of selected cuts
Merge assets as EDL, regardless of the input's format
Merge Trimmed files
Merge files with different framerates
Merge P2 with different audio channels
Merge operations for Devices sources
Allow the merge of more than 200 assets
Support for spanned Panasonic P2 structure
Preserve original time code breaks in Panasonic P2 Format
Mute proxy option in output (requires proxy option)
Create Edit Decision Lists with cut points
View the total duration of the sub-clips in an EDL widget
Ingest from cloud locations
Digital Cinema Package (DCP) support
Choose to force fragment MP4 clips while uploading to a S3 bucket
Generation of MP4 files as fragmented MP4 with DCP packager
Digital Picture Exchange (DPX) support
Select IMF (Netflix Compliant) as the output metadata
FTP for generic network devices as input
Ability to delete OPAtom source files after ingest
Support for GOPRO spanned files
Support video with vertical rotation
MOG file package support
Support MOG Package from Cloud Storages
Outgest growing media directly from Interplay
Dual check in to interplay in a merge as sequence operation with the same MOBID for the sequences
HDR (PQ, HLG) conversion to SDR as output
Ingest image files

## Features

- Support 48fps drop frame media (DJI Camera Drones)
- Support for spanned clips
- XDCAM support for spanned & merge clips in network locations/network devices
- Add black bars to match the aspect ratio
- Delete an Output via Job Abort
- Schedule an Ingest operation through the Calendar via Automatic Jobs
- Ingest and/or transcode the contents according to the destination format
- Vubiquity assets support
- Support for Vizzi collections as input files
- Browse Avid Interplay folder structure from within the "Workflow selection window"
- Avid Sub Clip export referencing Growing Master Clip
- Generate Avid OPAtom assets to an FTP server
- Update Metadata in Media Central/Interplay using AMT-3 library
- Create Live Ingest Operations
- Live Sources made available in the Asset Browser/Explorer widgets
- Override start timecode
- Index clips with same name but with different metadata
- Exclude file extensions from File inputs

### Burn-In Video options

- Graphic burn-in while recording
- Graphic burn-in while ingesting
- 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

### Quality control - Report

#### Video Report

- Black frames detection
- Video freeze detection
- Scene change detection

#### Audio Report

- Audio clipping detection
- Loudness detection
- Silence detection

#### Others

- Timecode gap detection

### Automated ingest

- Dynamic workflows using metadata fields
- Dynamic workflows with support for metadata without sidecars
- Delete Assets in Dynamic Jobs
- Support different input types on dynamic configurations
- Ignore files before a start date
- Re-process assets with the same name
- Support metadata enhancement workflows
- Vizzi Collections support

### 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

## Features

- 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
- Simple Time Delay: Scheduling a Playback of a Single File in Growing Recording Mode
- 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

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



**Features**

Metadata in Chrome Social-m Plugin *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
<b>PAM - Production Asset Management *Optional</b>
Advanced text search
Asset browser permissions
Asset collections
Asset essences
Asset essences for generic sources
Asset comments
Enable on-the-fly tagging
Flexible metadata management
Dynamic Automatic Jobs - Age value for CreationDate (Available for Copy, Move, Archive Workflows)
Display of Essences File Paths
Check-in via detector
Check-in via metadata update
Check-in via workflow
Interactive approval workflows
MOG player proxy
Optional Proxy creation
Manual Proxy creation
Move option in asset collections
Collections as input in automatic jobs
Private and shared asset collections
Show the creator of the collection
Statistics for collections
Save searches and filters
Rich logging workflows
User abstraction for in/out assets
Instant play, anytime and anywhere of any asset (with or without proxy)
Disk-to-Disk Storage Manager (Archive and Restore)
<b>Metadata Enhancement and preservation</b>
<b>Artificial Intelligence</b>
<b>Audio</b>
Audio clipping detection
Loudness detection
Silence detection
Voice activity detection
Audio mute detection
Audio phase detection
Mono audio detection
<b>Video</b>
Black frames detection
Video freeze detection
Scene change detection
Black Margins detection
Flashing video detection
<b>Object</b>
Concept tagger 2.0
Vehicle detection
License plate detection
<b>Others</b>
Timecode gap detection
Update existing interplay entry with new metadata
Possibility to add bounding boxes to player

## Features

### Transform

- Automatically Blur License Plates
- Black margins automatic crop
- Remove audio clicks
- Remove audio clipping
- AI Upscale
- Reduce video flashing

### Additional AI Operations \*Optional

- Face recognition 2.0
- Face recognition - Support dataset with multiple images for each person
- Age prediction detection
- Object detection 2.0
- Optical Character Recognition (OCR)
- Speech recognition 2.0 (with ability to detect non speech tokens)

### 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
- DASH/HLS packager with DRM
- 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 Cluster Configuration while displaying running services per node

### Transfer acceleration protocols

- Aspera FASP transport technology - Transfer acceleration protocol
- FileCatalyst direct - Transfer acceleration protocol

### Hardware acceleration \*If Hardware is installed or available

- 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

## Features

- Embeddable Dashboards/Widgets
- 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
- 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

##### 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
- GoPro Cards
- IKEGAMI GFPAK
- JVC (AVC HD models)
- NextoDI NSB-25
- Panasonic AU-EVA1 and GH5 Cameras

##### Panasonic P2

- AJ-PCD 2 / AJ-PCD 20/30/35 / AJ-MPD1
- AU-XPDI1E / AU-XPDI3EJ

##### XDCAM EX:

- Sony SxS (SBAC-UT100, SBAC-US10/20/30)

##### XDCAM HD

- Sony XDCAM HD: Disc (PDW-U1, PDW-U2, PDW-U4)

##### XAVC Structures

- DJI (Camera Drones)

#### OnPrem

- HLS Structures
- MPEG-TS Structures
- MOG Package

##### 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

##### Social Media

- Facebook
- X (Twitter)
- Vimeo
- YouTube

#### Cloud

##### Professional Cloud Storages

- Adobe Creative Cloud
- Amazon S3 Glacier
- Microsoft Azure Storage
- Tencent
- Lucidlink Cloud NAS
- Google Cloud Storage
- IBM Cloud Object Storage

**Inputs**

<b>Cloud</b>	Generic S3 storages
	<b>Consumer Cloud Storages</b>
	Apple I Cloud Drive
	Dropbox
	Google Drive
	Microsoft One Drive

**Supported File Outputs**

**Outputs**

<b>OnPrem</b>	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	
<b>Cloud</b>	<b>Consumer Cloud Storages</b>
	Apple I Cloud Drive
	Dropbox
	Google Drive
	Microsoft One Drive
	<b>Multiple and Adaptive bitrates for the OTT</b>
	<b>Professional Cloud Storages</b>
	Adobe Creative Cloud
	Amazon S3 Glacier
	Microsoft Azure Storage
	Tencent
	Lucidlink Cloud NAS
	Google Cloud Storage
	IBM Cloud Object Storage
	Generic S3 storages
<b>Social Media</b>	
Facebook	
X (Twitter)	
Vimeo	
YouTube	

**Supported Live Inputs**

**Inputs**

<b>Live</b>	<b>SD/HD/FHD-SDI</b>
	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
	<b>Streams</b>
	Video Content Hyperlinks
	HLS
	MPEG-TS
	MPEG-DASH
	RTMP (with support for HEVC / VP9 / AV1)
	RTP

**Inputs**

<b>Live</b>	RTSP
	NewTek NDI
	UDP
	Haivision SRT
	WebRTC
	Zixi
	<b>Audio</b>
	Dante audio *Negotiated separately
	<b>Social Media</b>
	Facebook
	Twitch
	X (Twitter)
	YouTube
	<b>IP Live *Optional</b>
	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**

<b>Live</b>	<b>Streams</b>
	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
	<b>Vizzi</b>
	Live Output
	<b>Social Media</b>
	Facebook
	Twitch
	X (Twitter)
	Vimeo
	YouTube
	<b>Multiple and Adaptive bitrates for the OTT</b>
	<b>IP Live *Optional</b>
	ST2022-7
	ST2110-10, ST2110-20, ST2110-21, ST2110-30, ST2110-31
	ST2110-40

**Formats**

**Input Formats**

**Input Video Formats**

ARRI ARRIRAW
Blackmagic RAW
Digital Cinema Packages (DCP)
Digital Picture Exchange (DPX)
RED Digital Cinema
IMX 30/40/50 Mbps

Input Video Formats

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 4320P 80 - 150 Mbps High Profile
H.264 4320P 150 - 280 Mbps High Profile
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 8K 25 Mbps LGOP
H.265/HEVC 8K 50 Mbps LGOP
H.265/HEVC 8K 100 Mbps LGOP
H.265/HEVC 4:2:2 LGOP
H.265/HEVC 4K 4:2:2 LGOP
H.265/HEVC 8K 4:2:2 LGOP
NDI HX H.264 - High Profile
NDI HX H.265 - High Profile
MPEG-5 EVC Baseline 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)
JPEG 2000 (8K)
Google® VP6 / VP7 / VP8 / VP9 (Full HD)
Uncompressed UYVY 422 / V210 / RGBA
AOMedia Video 1 (Full HD)
AOMedia Video 1 (4K)

### Input Video Formats

AOMedia Video 1 (8K)  
 IMF (JPEG 2000 @ Full HD)  
 IMF (JPEG 2000 @ 4K)  
 IMF (JPEG 2000 @ 8K)

### 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 4320p 150 - 280 Mbps High Profile  
 H.264 4320p 80 - 150 Mbps High Profile  
 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)  
 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



**Output Video Formats**

H.265/HEVC 4K 25 Mbps LGOP  
 H.265/HEVC 4K 50 Mbps LGOP  
 H.265/HEVC 8K 25 Mbps LGOP  
 H.265/HEVC 8K 50 Mbps LGOP  
 H.265/HEVC 8K 100 Mbps LGOP  
 NDI HX H.264 - High Profile  
 NDI HX H.265 - High Profile  
 MPEG-5 EVC Baseline 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)  
 JPEG 2000 (8K)  
 Google® VP6 / VP7 / VP8  
 Google® VP9 (Full HD)  
 Google® VP9 (4K)  
 Google® VP9 (8K)  
 Uncompressed UYVY 422 / V210 / RGBA  
 AOMedia Video 1 (Full HD)  
 AOMedia Video 1 (4K)  
 AOMedia Video 1 (8K)  
 IMF (JPEG 2000 @ Full HD / 4K / 8K)

**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 MOG 1Mbps  
 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)

**Output OTT Formats**

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)

**Product Integrations**

Editing Sytems	MAM / PAM / DAM	Cameras	Consumer Cloud Storages
Adobe Premiere Pro	CatDV MAM	Canon (DSLR5D, DSLR 7D)	Dropbox
AVID Media Composer	CatDV PAM	Canon (DSLR C300, DSLR C100)	Google Drive
AVID Media Central UX	CatDV DAM	ARRI Alexa XT (ARRIRAW)	Microsoft One Drive
AVID Media Central Cloud UX	eMAM Media Asset Management	Panasonic AU-EVA1	Apple I Cloud Drive
Apple Final Cut Pro X	Telestream: Masstech	Panasonic GH5 Cameras	<b>CDN's</b>
Edius: Pro 8, Workgroup 9	AVID Interplay	Panasonic CX350 HEVC	Lumen
BlackMagic: DaVinci Resolve Studio	AVID Media Central UX	Panasonic PTZ Cameras	Fastly
Autodesk: Flame	AVID Media Central Cloud UX	Ikegami Gfpack	Akamai Technologies
<b>Storage</b>	AXLE MAM	JVC AVC HD camera models	Microsoft Azure
AVID ISIS Storage	Editshare Flow	LUMIX DC-S1H	Cloudflare
AVID Nexis Storage	MOG Vizzi	NewTek PTZ3 UHD Camera	Limelight Networks
Avid Unity™ MediaNetwork	Medialoopster MAM	NewTek PTZ3 Camera	Amazon CloudFront
Dynamic Drive Pool SAN Storage	<b>Professional Cloud Storages</b>	RED Digital Cinema	BootstrapCDN
Facilis Terrablock	Adobe Creative Cloud	GOPRO	StackPath
Harmonic MediaGrid	Amazon EC2	<b>Card Readers</b>	KeyCDN
Quantum: Storenext	Amazon S3	Panasonic P2 (AJ PCD 2 / AJ PCD 20/30/35)	Rackspace
Scalelogic: NX2 & ZX NAS Storage	Amazon S3 Glacier	Panasonic P2 (AJ MPD1)	Alibaba Cloud Content Delivery Service
Editshare EFS	Microsoft Azure Storage	Panasonic P2 (AU-XPD1E / AU-XPD3EJ)	CacheFly
EMC: Isilon	Microsoft Azure Virtual Machines	Panasonic P2 (AG HPG 20)	Verizon
QNAP	Tencent: Cloud Storage	Sony XDCAM EX (SxS Cards): SBAC-US10/20/30	<b>Social Media *Optional</b>
Studio Network Solutions: EVO	Lucidlink Cloud NAS	Sony XDCAM EX (SxS Cards): SBAC-UT100	Facebook
Oracle Storage	Google Cloud Storage	Sony XDCAM EX (SxS Cards): MRW E-80	Twitch
Netapp	IBM Cloud Object Storage	Sony XDCAM EX (SxS Cards): MRW E-90	X (Twitter)
<b>Transfer Acceleration Protocols</b>	Generic S3	Sony Disc Reader: PDW-U1, PDW-U2	YouTube
File Catalyst Direct	<b>Stream</b>	<b>VTR Decks</b>	Vimeo
IBM: Aspera File Transfer	Newtek NDI	XDCAM HD: Disc (PDW 1500, PDW HD1500)	<b>Archive</b>
<b>Peripheral Devices</b>	Haivision SRT	XDCAM HD: Disc (PDW F70)	Archiware P5
Countour Shuttle Pro V2	Zixi	XDCAM Station (XDS1000)	<b>Audio</b>
Elgato Stream Deck	<b>Structures</b>		Dante *Negotiated separately
	XAVC Structures		

## Server Options

Features		Specs	
System	Platform	Dell R750	
	GPU	1x Nvidia A2	
	Video IO	1x DeckLink 4K Extreme 12G	
	Storage Drive	HDD 128 TB (RAW) - HDD 112 TB in RAID 5	
	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
		HDMI In	1
		HDMI Out	1
	USB	2.0	1
		3.0	1
	BNC 12G In		2
	BNC 12G Out		2
	Optical Fiber In/Out		2
Breakout Connector		1	
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 mDECK Grand rp, it is possible to run different media operations simultaneously, thus guaranteeing a universe of distinct arrangements to meet the challenging day-to-day activities of media production companies.

Media operations include recording, ingest, transcoding, and file preview.

mDECK Grand rp supports up to 4 media operations at the same time. Within this margin, you can combine the operations shown in the table below:

Concurrent Media Operations		
Record	Ingest & Transcode	File Preview
Up to 2 live channels	Up to 1 operation	Up to 10 files preview

## Product

Part Number	Product	Description
mdgrpp	mDECK Grand rp	Deck appliance for production asset management workflows of up to 5 combined media operations

## Available Options

Choose from the products below to customize the mDECK Grand rp according to your business rules.

### Production Tools

Tools for asset management and workflow orchestration.



#### mPAM

Benefit from a state-of-the-art content and production asset manager tool with mPAM. Streamline daily operations and empower your creative teams with the right tools to find, manage, track, enhance and deliver media files throughout the entire production ecosystem from a single interface.

Part Number	Product	Description
mpam1u	mPAM	Content and production asset manager per licensed user

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

### Plugins

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



#### Social-m

Quickly fetch and publish your live or VoD contents to social media.

This social media plugin for Chrome will let users ingest media without having to access the mDECK GUI, allowing the content to be ready for editing or any other task, in no time. Simply open the plugin, insert the URL and run the workflow to fetch your video, with option to preserve metadata.

Part Number	Product	Description
smpl	Social-m plugin	Social media capture & Publishing

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

### Artificial Intelligence

Artificial intelligence engine to boost and facilitate media tasks even more.

Default (already included)	
Black frames detection	Voice activity detection
Video freeze detection	Silence detection
Black margins detection	Loudness detection
Audio clipping detection	Loudness balance
Audio mute detection	Vehicle detection
Audio phase detection	License plate detection
Audio mono detection	Concept tagger
Timecode gap detection	Bouncing boxes
Scene change detection	Update existing interplay entry with new metadata
Transformation	
Frame rate conversion	Crop black margins
Remove audio clicks	AI upscale
Remove audio clipping	Blur license plates

Additional AI Operations	
Part Number	Product
graifr	Face Recognition and Age Prediction
graiod	Object Detection
graicr	Optical Character Recognition
graisr	Speech Recognition

**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
-	IP live card	Add up to 2 UHD IP channels into your media production infrastructure

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

Contact our sales team at [sales@mog-technologies.com](mailto:sales@mog-technologies.com) to find out how to purchase or in case you need more information.

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