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.
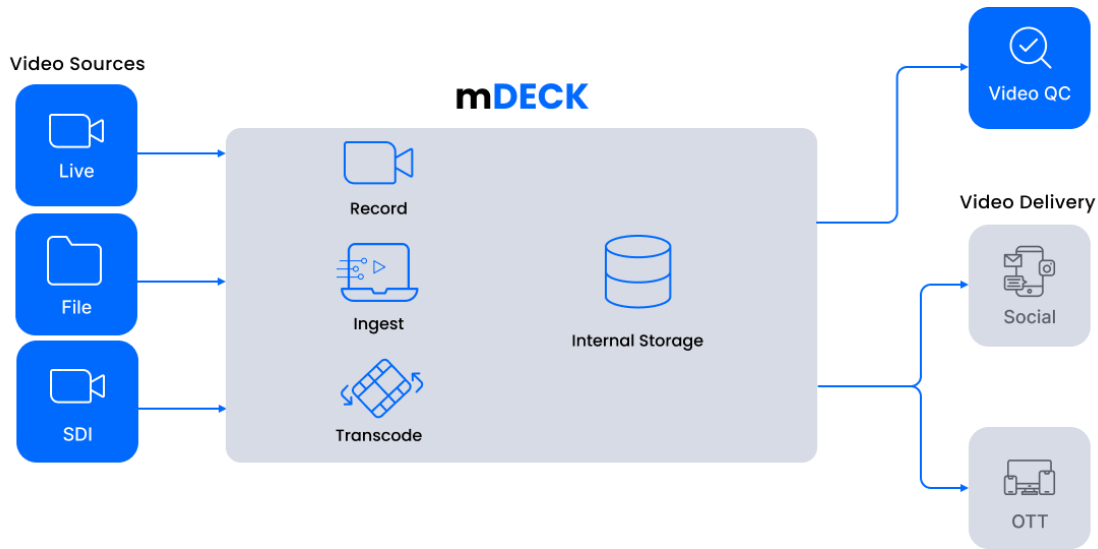
Highlights

- 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 engine

Specially Designed For

- Educational/Government
- Live Entertainment/Worship
- Corporate
- Sports

- Digital News
- Archiving
- Post-Production
- Television/Broadcasting

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
Hide unused Capture Instances
Synchronized gang captures
Ability to choose which channels are present in the gang
Frame Chase editing
Unlimited capture duration support
Loop record support
Extend playlist maximum duration in Loop Record workflows
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
Generation of MP4 files as fragmented MP4 with DCP packager
Generate XML sidecars with WAV file as output while recording
Perform "Run after completion" scripts
Live Probing option
Stream Closed Captions
Edit a Workflow directly from the Player
Option to start timecode recording from 00:00:00:00
Export MOG playlist (.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)
Operation modes
Automatic
Manual
Scheduled
Clipnaming
Flexible file renaming engine
Create multiple and diverse Clipnaming templates
Clipnaming based under 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
Time Zone Support when the "CreationDate" field is selected
Support to append "_p" to proxy clip names
Multi-Configuration metadata management and enrichment
Internal asset management
Quickly search for assets metadata
Metadata management
Metadata generation on capture operations
Metadata fields - prevent overwrite
Protection of metadata fields
Delete custom metadata
Edit group clip metadata
Edit source metadata based on a metadata profile
"Description" field editable in metadata widget
"Description" field as a column in the asset explorer list view
Send metadata to Gang Captures
Favorite metadata fields
Create custom metadata fields
Rating metadata field

Features

- Metadata source update directly in the metadata widget
- Add asset tags insertion in preset list
- Support re-using lists of possible values
- Update Metadata in Media Central/Interplay using AMT-3 library
- Ability to rename media in Interplay after capture began
- Take field (counter)
- Support for "Reel" metadata field using Apple ProRes Wrapper
- Read metadata from cloud storage (Amazon S3 / Google Cloud Storage / Tencent / IBM Cloud Object Storage)
- Preserve Arri specific fields
- Preserve RED digital cinema color information

Find immediately and learn everything about any asset
- Asset Browser - Show/hide proxies
- Asset Browser - Sort, order, and search
- Asset Explorer - Resizable thumbnails
- Asset Explorer - Support asset availability
- Asset Explorer - Search all
- Asset Explorer - Extraction of thumbnails and posters while indexing
- Asset Explorer - Playable thumbnails
- Asset Explorer - Pop-up player
- Asset Explorer - View the exact duration of files with more than 24 hours
- Asset Selection -View the total duration of the selected assets
- Asset Selection - Configurable asset 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)
- PCM 96KHz support
- Independent audio encoder for hires and proxy
- Individual audio mapping 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
- Mute proxy option in 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 Closed Captions

Locators
- Create locators with shortcut keys
- Edit and delete locators
- Edit locators description
- Insertion and viewing
- Action fields creation and customization
- Comments insertion in a markers widget tab
- Locators source in markers widget
- Multiple subcategories for a locator
- Order asset locators by timecode
- Absolute timecode for source locators
- Enter Timecode without the need of entering colons
- Eject locators using the player eject button
- Locators merge
- Support for locators with AMT captures
- Send locators to gang captures
- Send locators to playout
- Preserve Metadata Enhancement locators created by an Automatic Job

Scheduler (Calendar View)
- Scheduled Record
- Scheduled Automatic Jobs via Scheduler

Features

- Edit individual events
- Allow editing of settings for each occurrence/repetition
- Configure the number of events repetitions
- Check collision between events with 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
- Pre-set naming templates
- Independent targets and multiple outputs support
- Capability to set 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
- Possibility to use the calendar notion option in order to adjust for daylight saving time automatically
- Ability to edit 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
- Time zone Support
- 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
- Signal error detection
- Drop frame detection
- Timecode breaks support
- 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 rPlayout input
- Variable Frame Rate Input
- Support IGMPv3 multicast

  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

  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
- Multiple simultaneous transcodes

Features
Batch ingest
Card ingest
Clip merge
Clip renaming
Disable Clip File Naming generation
Partial restore
Rough cut
Insert Subclips SOM and EOM without colons
Automatic drag and drop ingest
Drag and drop from 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
Automatically select workflows available in job control attending the source files
Allow the creation of clip cuts in growing files to be added to a playlist for playout
Directly select the storage on the dashboard instead of accessing workflow profiles
Copy assets
Group Assets - Group the resulting outputs into a single asset
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 ingest
Use 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
Do not overwrite files option
Support for .MOV files containing "Run-length encoding" video essence
Enable "growing" support on EDL ingest workflow
Merge as EDL independent of input format
Merge Trimmed files
Merge files with different framerates
Merge P2 with different audio channels
Merge operations for Devices sources
Allow 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)
Edit decision lists with cut points
Display the total duration of sub-clips on Edit Decision List widget
Ingest from cloud locations
Digital Cinema Package (DCP) support
DCP Packager - Possibility to force fragmented MP4 while uploading to S3 buckets
Generation of MP4 files as fragmented MP4 with DCP packager
Digital Picture Exchange (DPX) support
IMF (Netflix Compliant) output metadata
FTP for generic network devices as input
Ability to delete OPAtom source files
Support for GOPRO spanned files
Support video with vertical rotation
MOG file package support
Support MOG Package from Cloud Storages
Outgest growing media from Interplay
HDR (PQ, HLG) conversion to SDR as output
Support for image files ingest
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 respect aspect ratio
Delete Output on Job Abort
Schedule ingest (Calendar) - Automatic Job
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
Live Ingest Operations
Live sources available in asset browser/explorer
Override start timecode
Burn-In Video options
Graphic burn-in while recording

Features

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
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
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
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

Features
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
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

PAM - Production Asset Management

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
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)

Metadata Enhancement and preservation

Artificial Intelligence

Audio

Audio clipping detection
Loudness detection
Silence detection
Voice activity detection
Audio mute detection
Audio phase detection
Mono audio detection

Video

Black frames detection
Video freeze detection
Scene change detection
Black Margins detection
Flashing video detection

Object

Concept tagger 2.0
Vehicle detection
License plate detection

Features

Others
- Timecode gap detection
- Update existing interplay entry with new metadata
- Possibility to add bounding boxes to player

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

Additional AI Operations
- 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
- Google Analytics and Tag Manager integration
- Option to enable and disable Analytics
- Track menu events
- Video metrics
- Track job control widget events
- Track asset explorer widget 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
- "Keep me signed in" login option
- User Verification through email
- Configurable password visibility in logs

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
- SMTP E-mail Notifications
- Support an external Database
- Microsoft Edge / Firefox and Chrome Support

Unified Interface User Experience
- Configurable web interface access port
- 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 custom dashboard templates
- Import and export of users Dashboards
- Associate same dashboards to multiple users
- LDAP user authentication
- User profile management
- Users permissions control
- Widget based modular interface
- Lock/Unlock widgets permission
- High contrast theme
- Touch screen mode
- Monitoring - Advanced metrics

Features
Multi Language Support
User tour
Show/Hide player overlays
Notifications of required actions needed to resume a workflow
View which servers in a group are running Capture and Ingest Operations in a Group activity widget
Possibility to remove quick edit button from Job Control widget
Permissions to activate or deactivate settings of Gang Capture widget

Multiviewer
Configurable 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
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
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-XPD1E / AU-XPD3EJ

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)
HLS Structures
MPEG-TS Structures

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

	Inputs
OnPrem	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
	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
	Facebook
	X (Twitter)
	Vimeo
	YouTube

Supported Live Inputs

Inputs

Live	**SD/HD/FHD-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)
	Streams
	Video Content Hyperlinks
	HLS
	MPEG-TS
	MPEG-DASH
	RTMP (with support for HEVC / VP9 / AV1)
	RTP
	RTSP
	NewTek NDI
	UDP
	Haivision SRT
	WebRTC
	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

Supported Live Outputs

Outputs

Live	**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
	Facebook
	Twitch
	X (Twitter)
	Vimeo
	YouTube
	Multiple and Adaptive bitrates for the OTT
	IP Live *Optional
	ST2022-7
	ST2110-10, ST2110-20, ST2110-21, ST2110-30, ST2110-31
	ST2110-40

Input Formats

Input Video Formats
ARRI ARRIRAW
Blackmagic RAW
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 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)
AOMedia Video 1 (8K)
IMF (JPEG 2000 @ Full HD)

Input Video Formats
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 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 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
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)

Output Video Formats

AOMedia Video 1 (4K)
AOMedia Video 1 (8K)
IMF (JPEG 2000 @ Full HD)
IMF (JPEG 2000 @ 4K)
IMF (JPEG 2000 @ 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 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.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	**CDN's**
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
Storage	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 UnityTM MediaNetwork	Medialoopster MAM	NewTek PTZ3 Camera	Amazon CloudFront
Dynamic Drive Pool SAN Storage	**Professional Cloud Storages**	RED Digital Cinema	BootstrapCDN
Facilis Terrablock	Adobe Creative Cloud	GOPRO	StackPath
Harmonic MediaGrid	Amazon EC2	**Card Readers**	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	**Social Media**
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	Twitter
Transfer Acceleration Protocols	Generic S3	Sony Disc Reader: PDW-U1, PDW-U2	YouTube
File Catalyst Direct	**Stream**	**VTR Decks**	Vimeo
IBM: Aspera File Transfer	Newtek NDI	XDCAM HD: Disc (PDW 1500, PDW HD1500)	
Peripheral Devices	Haivision SRT	XDCAM HD: Disc (PDW F70)	
Countour Shuttle Pro V2	**Structures**	XDCAM Station (XDS1000)	
Elgato Stream Deck	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 Board****	**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

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
mdgrrp	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
smpi	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.*

Cards

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

Part Number	Product	Description
pcbx	Peripheral card	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 to find out how to purchase or in case you need more information.