

### **mDECK Solid io**



### Overview

Take your content production to the next level with mDECK Solid io, a professional media deck that ensures incredible reliability and elasticity with the combination of record, ingest, transcode, and playback operations in 4K, UHD, FHD, and NDI. All in a single box and with users working together as a group.

This powerful appliance ensures broadcast quality for hybrid workflows (file-based and live) while supporting the most used formats on the market.

Additionally, it has an option for local storage of 8TB, PSU redundancy, and an OS Drive.



### Highlights

- mPAM Content and production asset manager for up to 4 users
- mSWITCH Remote live switching and composing
- mTALK Audio communication between users
- Live to live multiple simultaneous records
- Batch capture
- Closed captions
- Multiple simultaneous transcodes
- File playback multiple simultaneous plays
- Metadata preservation, enhancement, and enrichment
- Playlist management

### **Specially Designed For**

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

- Media checksum
- Quality control, audio, and video report
- Flexible file naming and renaming engine
- Locators support
- Automated file ingest
- Supports spanned clips
- Proxy generation
- Playout preparation and control
- Improved security
- Artificial intelligence
- Digitalization
- Archiving
- 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
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
Liveo NewsML batch capture
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
Video Router Protocols
Quartz
Probel SW-P-08
Jupiter ASCII
Blackmagic Videohub Ethernet Protocol
Operation modes
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



Features Dolby-E Input and output support DTS Coherent Acoustics (DCA) Integration with Dante Audio Capture \*Negotiated separately PCM 96KHz support Independent audio encoder for hires and proxy Individually map your audio by output target Record audio only streams Playout audio only streams 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



Features
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 a MOG S1000
Perform captures from an Airspeed 5000
Perform captures from a Softron Movie Recorder
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
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 a MOG S1000
Selectable MOG S1000 capture profiles
Perform captures from an Airspeed 5000
Perform captures from a Softron Movie Recorder
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)
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 rPlayout input
Variable Frame Rate Input



Features	
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	
Live switcher - Capture switcher producer	
Commute between channels while recording	
Record audio and video from one channel, or just audio or video	
Playout from SDI Inputs	
Playout from Streams Inputs	
Playout from File Inputs	
Overlay graphics support	
Chroma Key as Input	
File ingest	
Execute multiple simultaneous transcodes	
Batch ingest	
Card ingest	
Clip merge	
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	



Features	
Automatically select workflows available in job control attending the source files	
Cut growing files and send them to (a playlist for) playout	
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	
Support 48fps drop frame media (DJI Camera Drones)	
Support for spanned clips	
XDCAM support for spanned & merge clips in network locations/network devices	
Delete an Output via Job Abort Schedule an Ingest operation through the Calendar via Automatic, Jobs	
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	



	Features
Create Live Ingest Operations	
Live Sources made available in the Asset Brows	er/Explorer widgets
Override start timecode	
Index clips with same name but with different m	etadata
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	3)
LUT (Look-Up Table) - Save particular color gra	des 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 v	vithout sidecars
Delete Assets in Dynamic Jobs	
Support different input types on dynamic config	urations
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	
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 duri	ng playback
Playback duration showing the remaining time o	f the clip
Remove clips	



<b>mDECK</b>
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Features
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 *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



Features
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
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)
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
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



Features
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)
mTALK
Communicate via audio between two or more users
QR code implementation
WebApp (requires Android smartphone)
Toggle Mode
Analytics
Integrate with Google Analytics and Tag Manager
Enable or disable Analytics
Keep track of menu events
Receive video metrics
Keep track of Job Control widget's events
Keep track of Asset Explorer widget's events
Improved security
Support for Windows UAC
Support for HTTP/HTTPS Ingress
HTTPS (Hypertext Transfer Protocol Secure) for REST API
Secure login
User Impersonation
Token based authentication
Two-factor authentication
Remote services, system restart, and settings recovery features
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 Cluser Configuration while displaying running servicers 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
Nvidia Nvenc
General Purpose IN/OUT GPI triggers supported
GPO triggers supported Additional Highlights
REST API - allows interaction with RESTful web services
Change Aspect Ratio (4:3 / 16:9 / 1.9:1 / 2:1 or use same as source)
Active Format Description (Option to Preserve, Discard or Override)
Notify user upon connection lost with the Server
Manage via web interface or REST APIs for integration with automation system
Configurable quality and target latency of the preview stream
Logging - Human readable information on Services logs
Logging - Add user information on flow actions
Logging - Structured Logging
Receive SMTP notifications via e-mail
Support an external Database
Microsoft Edge / Firefox / Safari and Chrome Support
Unified Interface User Experience
Configurable web interface access port
Embeddable Dashboards/Widgets
Web-Based Interface with video preview
Dashboards based experience where users can create their own personalized view



Features
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
OnPrem	Avid Files
Ollerein	Avid Media Files (standalone or Nexis/ISIS)
	Avid Sequences (master clips and rendered sequences)
	CANON DSLR 5D, 7D, C300, C100
	GoPro Cards
	IKEGAMI GFPAK



Inputs 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** MOG Package Network XDCAM Network OnPrem P2 Network ARRI RAW Network Ikegami Network Storage Avid ISIS / Nexis Avid Unity<sup>™</sup> 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 **Professional Cloud Storages** Adobe Creative Cloud Amazon S3 Glacier Microsoft Azure Storage Cloud 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



## **mDECK**

### **Supported File Outputs**

	Outputs
	Avid ISIS / Nexis
	Avid Unity™ MediaNetwork
	DDP – Dynamic Drive Pool
	Facilis TerraBlock
	Harmonic MediaGrid
	Editshare EFS
	NAS / SAS (SMB 2.0 and 3.0)
OnPrem	Quantum StorNext
OnPrem	ScaleLogic NX2 & ZX NAS Storage
	EMC Isilon
	QNAP
	Studio Network Solutions EVO
	Oracle Storage
	Netapp
	FTP Servers (List on request)
	Generic File Shares
	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
Cloud	Microsoft Azure Storage
olouu	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
	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
Live	MPEG-TS
	MPEG-DASH
	RTMP (with support for HEVC / VP9 / AV1)
	RTP
	RTSP
	NewTek NDI
	UDP
	Haivision SRT
	WebRTC
	Zixi



	Inputs
	Audio
	Dante audio *Negotiated separately
	Social Media
Live	Facebook
	Twitch
	X (Twitter)
	YouTube

### Supported Live Outputs

	Outputs
	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
	HLS
	HTTPS Push
	Microsoft Smooth Streaming
	MPEG-DASH
	Low Latency Dash - LL-Dash
	NewTek NDI
	MPEG-TS
Live	RTMP (with support for HEVC / VP9 / AV1)
	RTP
	RTSP
	UDP
	Haivision SRT
	WebRTC
	Vizzi
	Live Output
	Social Media *Optional
	Facebook
	Twitch
	X (Twitter)
	Vimeo
	YouTube
	Multiple and Adaptive bitrates for the OTT *Optional

#### 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
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 LGOP 25 / 35 / 50 Mbps
DVCPRO 25/50 Mbps / DVCPRO HD 100 Mbps
AVC-Intra 50/100 Mbps



Input Video Formats

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 4:2:2 LGOP H.265/HEVC 4K 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) Google® VP6 / VP7 / VP8 / VP9 (Full HD) Uncompressed UYVY 422 / V210 / RGBA AOMedia Video 1 (Full HD) AOMedia Video 1 (4K) IMF (JPEG 2000 @ Full HD) IMF (JPEG 2000 @ 4K)

#### **Output Formats**

**Output Video Formats** 

IMX 30/40/50 Mbps
MPEG2 LGOP 18/25/35 Mbps 4:2:0
MPEG2 LGOP 50/70 Mbps 4:2:2
MPEG2 LGOP 422 50 Mbps
MPEG2 LGOP 420 1440x1080 35 Mbps
MPEG2 LGOP 420 (FULL) 35 Mbps
DVCAM 25 Mbps
XAVC Intra 50 / 100 Mbps
XAVC LGOP 25 / 35 / 50 Mbps
DVCPRO 25/50 Mbps / DVCPRO HD 100 Mbps
AVC-Intra 50/100 Mbps



**Output Video Formats** 

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 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 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) Google® VP6 / VP7 / VP8 Google® VP9 (Full HD) Google® VP9 (4K) Uncompressed UYVY 422 / V210 / RGBA AOMedia Video 1 (Full HD) AOMedia Video 1 (4K) IMF (JPEG 2000 @ Full HD) IMF (JPEG 2000 @ 4K)



#### **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

Output OTT Formats

#### **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	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
acilis 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 *Optional
Studio Network Solutions: EVO	Lucidlink Cloud NAS	Sony XDCAM EX (SxS Cards): SBAC-UT100	Facebook
Dracle 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)
Transfer Acceleration Protocols	Generic S3	Sony Disc Reader: PDW-U1, PDW-U2	YouTube
File Catalyst Direct	Stream	VTR Decks	Vimeo
BM: Aspera File Transfer	Newtek NDI	XDCAM HD: Disc (PDW 1500, PDW HD1500)	Archive
Peripheral Devices	Haivision SRT	XDCAM HD: Disc (PDW F70)	Archiware P5
Countour Shuttle Pro V2	Zixi	XDCAM Station (XDS1000)	Audio
Elgato Stream Deck	Structures		Dante *Negotiated separately
	XAVC Structures		



### **Server Options**

Features			Specs
	Platform		Dell XR12
System	GPU		1x Nvidia A2
	Video IO		1x DeckLink 8K Pro
	Storage Drive		8TB SSD**
	Operating System Drive		480GB RAID 1
	Operating System		Windows 10 Enterprise (LTSC)
	Networking	1Gb Ethernet Port	2
	Networking	10Gb Ethernet Port SFP+	4
~	Video	VGA Out	1
Connectivity	USB	2.0	1
Ject	036	3.0	1
ino	Serial		1
0	BNC 12G In/Out		4
	Ref. In		1
	Power Requirements		Dual 1400W
	Peripheral Module**	LTC Input	1
d vity		Audio Out	1
nde		Breakout Connector	1
Extended Connectivity	Breakout Cable**	RS422	4
<sup>۳</sup> ی		GPO branch with 4 outputs	1
		GPI branch with 4 inputs	1
	Dimensions & Weight		2RU, 463x482x86.8mm (D, W, H), ~20.5 kg
Other	Delivery Packaging		470x487x92mm (D, W, H), ~25Kg
	Temperature	Storage**	-40°C to 65°C (-40°F to 149°F)
Ğ		<b>Continuous Operation</b>	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 Solid io, 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, playback, file preview, live channel switching, and intercom.

mDECK Solid io supports up to 6 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	Playback	File Preview	Live Switch	Intercom
Up to 4 live channels	Up to 1 operation	Up to 4 playback files	Up to 5 files preview	Up to 1 operation	Up to 1 operation

**Note:** when using operations dependent on video inputs and outputs, the physical limit of the video card must be respected. Thus, the sum of these operations cannot be greater than 4.

### Product

Part Number	Product	Description
mdslio	mDECK Solid io	Deck appliance for hybrid workflows of up to 7 combined media operations





### **Available Options**

Choose from the products below to customize the mDECK Solid io according to your business rules.

#### **Production Tools**

Tools 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
mpla4c	mPLAN	Scheduler & Router Control of up to 4 channels

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

#### Add-ons

Output options to complement your workflows.

Part Number	Product	Description
sloasa	OTT & Social media	Multiple output resolutions for OTT & Simultaneous social media shares

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

#### Plugins

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



#### 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.



#### Screen-m

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

Part Number	Product	Description
smpi	Social-m plugin	Social media capture & Publishing
scpi	Screen-m plugin	Screen capture & Delivery

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	Al upscale	
Remove audio clipping	Blur license plates	

Additional AI Operations		
Part Number	Product	
slaifr	Face Recognition and Age Prediction	
slaiod	Object Detection	
slaicr	Optical Character Recognition	
slaisr	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	Description 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.

#### Storage

#### Option for local storage.

Part Number	Description
mdslssd8t	8TB of SSD storage

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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