

mLIVE Solid io



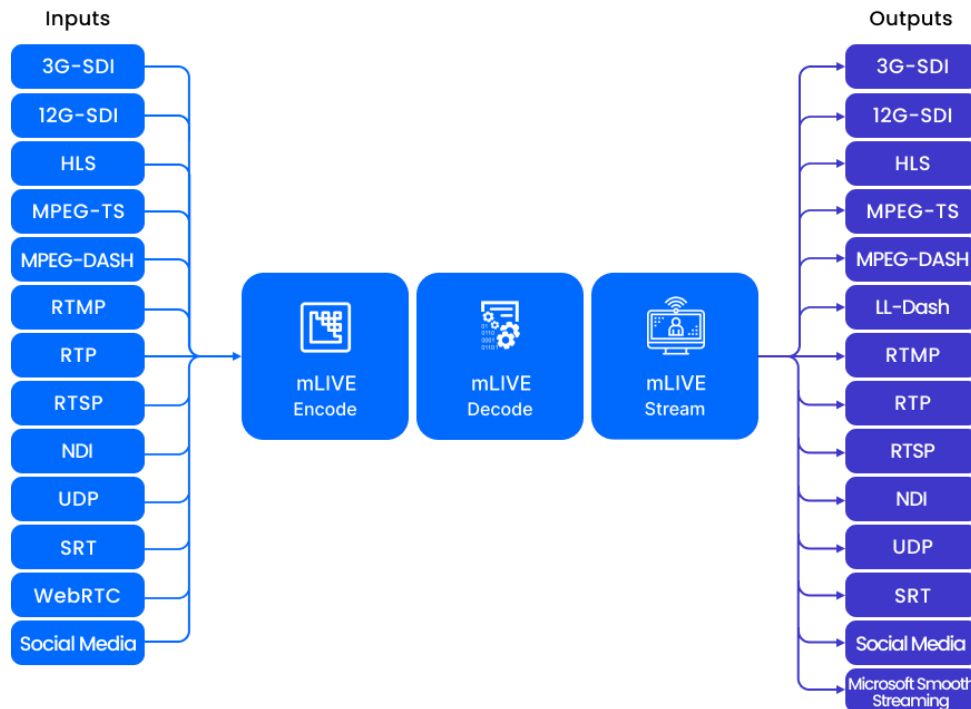
Overview

mLIVE Solid io is a powerful and flexible encode and decode appliance to manage all your live video streams in an integrated media production ecosystem.

It brings you unparalleled power and proven reliability, no matter the scenario. Broadcast live events, automate 24/7 channels playout, or distribute to OTT and social media effortlessly, no matter the source.

mLIVE Solid io supports simultaneous media operations that can be a combination of live video streams, file previews, live switching, and even intercom between different users.

Additionally, it has an option for 8TB of storage.



Highlights

- **mPLAN** - Scheduler & Router Control
- **mSWITCH** - Remote live switching and compositing
- **mTALK** - Audio communication between users
- Encodes and/or decodes contents according to the destination format
- Full featured local and remote user interface (includes quick control through touch screen)
- Operation modes: manual and scheduled
- Multiple output resolutions for OTT
- Ideal for multiple feeds of video contribution
- Social media sharing

Specially Designed For

- Educational/Government
- Live Entertainment/Worship
- Corporate
- Sports
- Film/TV Studio/Scripted
- Mobile Studios/OB Vans
- Post-Production
- Broadcast/Digital News
- OTT & Streaming
- System Integrators/Rentals

Features

Features
Timecode support
LTC (SMPTE 12M)
VITC (SMPTE RP188)
Time of Day
Multiple LIVE and simultaneous records
Gang Capture operations
Independent workflow selection in Gang Captures
Flexible Gang Capture channel configurations / Choose which channels are present in the gang
Automatic Stream Control - Detect input streams and start recording automatically
Continuous live stream capture
Generate MP4 files as Fragmented MP4 via DCP Packager
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
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
Manual
Scheduled
Clipnaming
Drag and Drop support
"CreationDate" field can refer to a desired Time Zone
Audio support
PCM input and output support
Dolby E-AC-3, Dolby TrueHD, and DTS input support
Dolby-E Input and output support
DTS Coherent Acoustics (DCA)
Integration with Dante Audio Capture *Negotiated separately
PCM 96KHz support
Independent audio encoder for hires and proxy
Individually map your audio by output target
Audio downmixing & upmixing
Ability to mute proxy on the output
Close captions
CEA/EIA - 608
Support DVB-S captions in streams
Stream with Closed Captions
Scheduler (Calendar View)
Schedule a Record operation
Schedule Gang Captures
Schedule Playouts
Schedule Maintenance Tasks (Reboot, Export Logs, Export Full Backup)
Edit individual events
Export activity events
Allow editing of settings for each occurrence/repetition
Set the number of an event's repetitions
Check for collisions between events and repetitions
Placeholder when editing an occurrence name

Features

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

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

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

Signal error detection and related recovery actions

Detect possible signal errors

Detect possible drop frames

Configurable capture resume methodology

Automatic streaming (headless) - Restart capture after stopping/crashing or rebooting

Live to Live

Delete artifacts on abort

Vizzi OTT Live Output

Multiple resolutions check-in

Support Time of Day in input streams (RTMP, MPEG-TS, RTP, SRT, RTSP, HLS, LLDASH, MSS, MPEG-DASH, CMAF)

Variable Frame Rate Input

Support IGMPv3 multicast

Add possibility to change the transport stream segments duration

MPEG-TS Support

Capture of MPEG-Transport Streams

Support of MPEG-TS program IDs

NDI

Native NDI output

NDI audio and video synchronized mechanism

NDI discovery mechanism

Capture multiple NDI sources

Time of day and embedded timecode options in NDI input

HLS

Configurable HLS segment duration

Configurable HLS Playlist segment count

Features

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

- VP8 Support
- VP9 Support

Burn-In Video options

- Graphic burn-in while recording

Input/output social media

- Capture to Facebook Live
- Stream to Facebook Live
- Stream to Twitch Live
- Capture to YouTube Live
- File based YouTube Upload
- Capture X (Twitter) Live
- Stream to X (Twitter) Live
- Upload to Vimeo
- Metadata social annotation and enhancement

mTALK

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

Analytics

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

Improved security

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

Orchestration

- Orchestration View for output workflows
- Services Menu that eases Group and Cluster Configuration while displaying running services per node

Hardware acceleration *If Hardware is installed or available

- Intel QSV

General Purpose IN/OUT

- GPI triggers supported

Features

GPO triggers supported

Additional Highlights

- REST API - allows interaction with RESTful web services
- 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 - 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
- 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

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 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)
	Support for 8, 10 and 12 bits
	Streams
	Video Content Hyperlinks
	HLS
	MPEG-TS
	MPEG-DASH
	RTMP (with support for HEVC / VP9 / AV1)
	RTP
	RTSP
	NewTek NDI
	UDP
	Haivision SRT
	WebRTC
	Zixi
	Audio
	Dante Audio *Negotiated separately
	Social Media
	Facebook
	Twitch
	X (Twitter)
YouTube	

Supported Live Outputs

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

Formats

Output Formats

Output Video 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 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 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
AOMedia Video 1 (Full HD)
AOMedia Video 1 (4K)

OTT Formats

Output OTT Formats

H.264 2160p 35 - 68 Mbps High Profile
H.264 1440p 16 - 24 Mbps High Profile
H.264 1080i 35 Mbps High Profile
H.264 1080p 8 - 12 Mbps High Profile
H.264 720p 5 - 7.5 Mbps High Profile
H.264 480p 2.5 - 4 Mbps High Profile
H.264 360p 1 - 1.5 Mbps High Profile
H.264 2160p 13 - 51 Mbps High Profile (Live)
H.264 1440p 6 - 18 Mbps High Profile (Live)
H.264 1080p 3 - 9 Mbps High Profile (Live)
H.264 720p 1.5 - 6 Mbps High Profile (Live)
H.264 480p 0.5 - 2.0 Mbps High Profile (Live)
H.264 360p 0.4 - 1.0 Mbps High Profile (Live)
H.264 240p 0.3 - 0.7 Mbps High Profile (Live)
H.264 360p CBR MAIN Profile
H.264 432p CBR MAIN Profile
H.264 576p CBR MAIN Profile

Output OTT Formats

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

Product Integrations

Stream	CDN's
Newtek NDI	Lumen
Haivision SRT	Fastly
Zixi	Akamai Technologies
Social Media	Microsoft Azure
Facebook	Cloudflare
Twitch	Limelight Networks
X (Twitter)	Amazon CloudFront
YouTube	BootstrapCDN
Vimeo	StackPath
Hypervisors	KeyCDN
Microsoft HyperV	Rackspace
VMWare ESX	Alibaba Cloud Content Delivery Service
Audio	CacheFly
Dante *Negotiated separately	Verizon

Server Options

Features		Specs	
System	Platform	Dell XR12	
	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)	
Connectivity	Networking	1Gb Ethernet Port	2
		10Gb Ethernet Port SFP+	4
	Video	VGA Out	1
	USB	2.0	1
		3.0	1
	Serial		1
	BNC 12G In/Out		4
	Ref. In		1
Power Requirements		Dual 1400W	
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, 463x482x86.8mm (D, W, H), ~20.5 kg
	Delivery Packaging		470x487x92mm (D, W, H), ~25Kg
	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 mLIVE 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 live video streams, file preview, live channel switching, and intercom.

mLIVE Solid io supports up to 8 media operations at the same time. Within this margin, you can combine the operations shown in the table below:

Concurrent Media Operations			
Live Video Streams	File Preview	Live Switch	Intercom
Up to 6 live channels	Up to 10 files preview	Up to 1 operation	Up to 1 operation

Product

Part Number	Product	Description
mlslio	mLIVE Solid io	Encode/decode appliance of up to 8 combined media operations

Available Options

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

Production Tools

Tool for 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
mpla8c	mPLAN	Scheduler & Router Control of up to 8 channels

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

Plugins

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



Screen-m

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

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

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

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

Hardware

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

Part Number	Product	Description
pcbx	Peripheral module	Optional MOG module to expand I/O available with 1x LTC, 1x audio output, 1x GPI, 1x GPO and 4x RS422

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

Storage

Option for local storage.

Part Number	Description
mls1ssd8t	8TB of SSD storage

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

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

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