



## mPORT Densu io



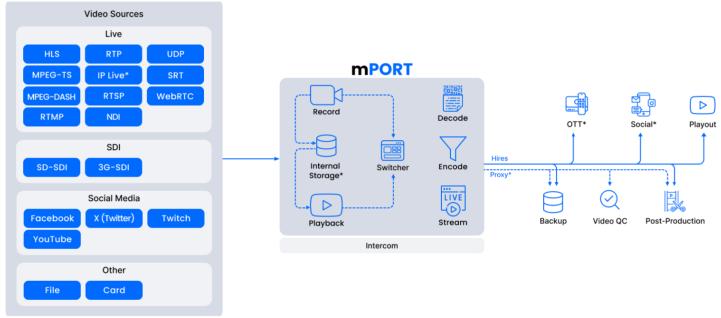
## **Overview**

Elevate your content production with mPORT Densu io, a robust and versatile multi-format compact appliance optimized for live ingest and playout within an integrated media production ecosystem. This professional solution integrates seamlessly into your existing workflows, offering comprehensive support for FHD, IP Live, and NDI workflows to elevate the quality and impact of your content.

Experience a state-of-the-art solution that enhances your media production processes, delivering unmatched flexibility, reliability, and efficiency. mPORT Densu io streamlines your operations, ushering in a new era of multimedia excellence and transforming your content creation workflows.

It supports multiple simultaneous media operations such as recording, playout, live video streams, file previews, live switching, and intercom communication among users, enabling a dynamic and collaborative production environment.

mPORT Densu io has a redundant power supply with options for 6 or 12TB of storage.



<sup>\*</sup> Optional

## **Highlights**

- mSWITCH: Remote live switching and composing
- Baseband ingest multiple simultaneous recordings: multicamera recording, loop recording, crash recording, schedule recording, batch recording;
- · Video server for multiple destinations of any storage, NAS, or SAN
- Burnt-in options: text, timecode, overlays (images and videos), and LUT
- File playback: multiple simultaneous operations: composition play, loop playback, instant play, schedule play, remote preview
- Encodes and/or decodes contents according to the destination format
- Playlist management: add clips, remove clips, reorder clips, export playlist, loop play
- Full featured local and remote user interface (includes quick control through touch screen)

- mTALK: Audio communication between users
- Overlays: clip-name and port-name
- Ideal for multiple feeds of video contribution
- Multi-configuration metadata management
- Flexible file naming engine
- Enable edit while ingest
- Operation modes: manual, scheduled, and automatic

## **Specially Designed For**

- Educational/Government
- Live Entertainment/Worship
- Corporate
- Sports
- Film/TV Studio/Scripted
- · Mobile Studios/OB Vans

- Digitalization
- Post-Production
- Broadcast/Digital News
- OTT & Streaming
- System Integrators/Rentals



# **mPORT**

## **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 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 \*required Nablet AMA Plugin Automatic Stream Control - Detect input streams and start recording automatically Continuous recording support Continuous live stream capture Recording timer for captures Abort or force stop a capture or a stream Frame rate conversion option on Capture workflows High Dynamic Range (HDR) support - HLG (arib std-b67) / PQ (SMPTE 2084) High Frame Rate (HFR) up to 120fps (ST2081-10, ST2081-11, ST2082-10, ST2082-11 and ST2082-30) Generate MP4 files as Fragmented MP4 via DCP Packager Add XML sidecars with WAV file as output while recording Perform "Run after completion" scripts Remove source assets after Job completion for all plain sources Live Probing option Stream with Closed Captions Edit a Workflow directly from the Player Input selection made directly from a dropdown list on the player Option to start timecode recording from 00:00:00:00 Export in "MOG playlist" format (.XML Sidecar containing information about the chunks of the recorded media) Batch record support Deck control through Serial Ports Pre-roll and post-roll options LiveU NewsML batch capture LiveU NewsML metadata import LiveU NewsML - support XML from devices (Live U, Android and iPhone) LiveU include subfolder browse Contribution Web Video Player - Aspect marker, Safe Area Marker, and Center marker Player Overlay - Center Dot and Cross Support for Active Format Description (AFD) Medialoopster Integration in Capture operations Medialoopster Integration in Batch Capture operations **Operation modes** Automatic Manual Scheduled Clipnaming based on Metadata Profiles Field numeric representation of the day of the week Drag and Drop support

Restore auto numbering on capture abort in naming templates





### Features

"CreationDate" field can refer to a desired Time Zone

Add the label "\_p" to proxy clips' names

#### Multi-Configuration metadata management and enrichment

Directly manage your assets metadata

Generate metadata directly through capture operations

Prevent the overwrite of metadata fields

Protect metadata fields

Delete custom metadata

Edit group clips metadata

Edit a file's source metadata based on a configured metadata profile

"Description" field editable in metadata widget

Set "Description" field as a column in the Asset Explorer list view

Forward metadata to Gang Captures

Favorite metadata fields

Create custom metadata fields

Add a "Rating" metadata field

Update the source metadata directly through the metadata widget

Add asset tags insertion in preset list

Re-use lists of possible values

Update Metadata in Media Central/Interplay using AMT-3 library

Rename media in Interplay after a capture has begun

Take field (counter)

Support for "Reel" metadata field using Apple ProRes Wrapper

Read metadata from pre-configured cloud storages (Amazon S3 / Google Cloud Storage / Tencent / IBM Cloud Object Storage)

Preserve specific Arri fields

Support IMF (Netflix Compliant) output metadata

## Find immediately and learn everything about any asset

Show or hide proxies on Asset Browser

Sort, order and search for files on Asset Browser

Asset Explorer - Resizable thumbnails

Asset Explorer - Support asset availability

Search for all assets on Asset Explorer

Extract thumbnails and posters while indexing on Asset Explorer

Asset Explorer - Playable thumbnails

Preview media with interactive Pop-up Players

Asset Explorer - View the exact duration of files with more than 24 hours

Asset Selection -View the total duration of the selected assets

Configure the asset's preview duration

Asset Selection - Add Numeric Input

### Asset management Check-in

AVID AAF

AVID interplay

XML support

XSLT transformation - XML sidecar

Edit share flow

Vizzi OTT check in

Support for update on Vizzi OTT check-in

## Audio support

PCM input and output support

Dolby E-AC-3, Dolby TrueHD, and DTS input support

Dolby-E Input and output support

DTS Coherent Acoustics (DCA)

Integration with Dante Audio Capture \*Negotiated separately

PCM 96KHz support

Independent audio encoder for hires and proxy

Individually map your audio by output target

Record audio only streams

Playout audio only streams

Audio downmixing & upmixing

External audio files support (.WAV)

MPEG-4 Audio (M4A) audio format as output

Ability to mute proxy on the output





### Close captions

CEA/EIA - 608

Add sidecar - SubRip (SRT)

Add sidecar - Fragmented WebVTT

Add sidecar - ISMT/CMFT subtitles

Support DVB-S captions in streams

Support captioning for OTT (CMFT, SubRip, and WebVTT)

Features

Stream with Closed Captions

#### Locators

Create locators with shortcut keys

Edit the locators' description

Insertion and viewing

Create and freely customize action fields

Insert comments in a marker's widget tab

Locators source in markers widget

Select multiple subcategories for a single locator

Order asset locators by timecode

Establish Absolute or Relative timecode for source locators

Enter Timecode without the need of entering colons

Eject locators using the player eject button

Support for locators with AMT captures

Send locators directly to Gang Captures

Send locators instantly to Playout

Preserve Metadata Enhancement locators created by an Automatic Job

#### Scheduler (Calendar View)

Schedule a Record operation

Schedule a Playout operation

Edit individual events

Allow editing of settings for each occurrence/repetition

Set the number of an event's repetitions

Check for collisions between events and repetitions

Placeholder when editing an occurrence name

Enable field event name as AVID Interplay clipname by default

Use pre-set naming templates

Send the assets to independent targets and multiple outputs

Establish a maximum capture duration

Configurable number of iterations when using maximum capture duration

Use AVID Interplay clip name as event name on crash record events

Pre-roll and post-roll options for scheduled events

Define events to be triggered on any day, on working days only or only on weekends

Set the Calendar Notion option to automatically adjust to daylight time

Edit the Start Time field after the first recording

Visualize scheduled events in a List View

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

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)

Features

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

#### **PTMP**

RTMP recording with absolute timecode

RTMP Push Mode in input and output

RTMP Pull Mode in input and output

Native RTMP listener capability

Multiple audio channels in RTMP Output

HEVC, VP9 and AV1 codec in enhanced RTMP/FLV

#### SRT

Input modes: Caller, Listener, and Rendezvous

SRT listener mode as stream output

Output modes: Caller and Rendezvous

Stream ID support

Configurable latency settings

Configurable overhead bandwidth

Configurable passphrase

Monitoring input metrics

#### WebRTC

h.264 Support

VP8 Support

VP9 Support

### **Burn-In Video options**

Graphic burn-in while recording

Text (Position, Text color, Box Color, Font Size)

Timecode (Position, Text color, Box Color, Font Size)

Overlays support (images and videos positioning)

LUT (Look-Up Table) - Save particular color grades as a template

#### File playback

Simultaneous playback

Composition play

Instant play

Gang Play

Replay a group or an individual asset

Loop playback

Group Loop Playback

Gridline (3x5) Overlay

Remote preview

Support for 10bit

Synchronous SDI playback of multiple files

Closed captions

Cue mode

Monitor - support HDR

Option to add locators





#### Features

Play assets from cloud storages

Preview Editing Decision Lists

Preview Clip Lists

Playback - 8K UHD

Embedded VITC output support

Step multiple frames forward and backwards on SDI/gang playback

Timecode and metadata overlaying on SDI out

Support for growing assets in player

Support for spanned assets in player

Timecode only monitoring

Use of a contour shuttle to control an asset during playback

Playback duration showing the remaining time of the clip

Remove clips

Reorder clips

**Export playlist** 

Create new playlists with the current assets selection

High Dynamic Range (HDR) support - HLG (arib std-b67) / PQ (SMPTE 2084)

High Frame Rate (HFR) up to 120fps (ST2081-10, ST2081-11, ST2082-10, ST2082-11 and ST2082-30)

Preview - Possibility to change the playback speed by multiplier factors

Read Metadata Timecode Package (Auto / Material Package / Source Package)

#### Playout

#### **Playout Preparation**

Build playlists in a Playlist Builder widget

Create multiple Playlists

Allow configuring playout clip action while preparing the playlist

Support visual separators for rPlayout playlists

Drag and Drop clips to the player for media preparation

Support insertion of Timecodes without separators ":" in the playlist builder

Use both types of TC (Relative and Absolute) for Mark-ins and mark-out at playlist builder

Trim clips to be included in the Playlist

Editable timecodes of the in and out points

Re-arrange clips order

**Duplicate Edit Decision Lists** 

**Export Edit Decision Lists** 

### **Playout Control**

Edit playlist on the fly and while playing

Playlist countdown and clip countdown

File and clip list progress bars

Playout Capture streams through SDI and native window

Print to tape

Queue clip on the playlist

Queue on first frame and last frame

Queue on first frame the first clip of the playlist

Bypass action for playout clips

Pause Playlist

Playout to stream

Thumbnail preview of the current clip on the playlist and its remaining time until Playout of the next clip

On Air - current loaded playlist name

Loop a playlist

Loop one or more assets in the playlist

Drag and Drop Clip List entries in Playout Control

Multi-channel playout capability

Schedule Playout

Choose between Playout Services available - rPlayerSDI or CasparCG

Mini control bar for use with Playout Control

Keyboard shortcuts for playout control and associated WEB player

Autoplay option

As Run Log's containing Date, Time, Clip name, Time Code In, and Time Code Out

Prepare the Playout clip actions while preparing the playlist

### Input/output social media \*Optional

Google Chrome Social-m Plugin

Social-m - Add support for live stream capture





Features

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

#### 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 Cluser Configurarion while displaying running servicers per node

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

Intel QSV

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

Dashboards presets for ease-of-use deployment





Features
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  Expert lest activity
Export all 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
	Avid Files
	Avid Media Files (standalone or Nexis/ISIS)
OnPrem	Avid Sequences (master clips and rendered sequences)
	CANON DSLR 5D, 7D, C300, C100
	Generic File Shares
	GoPro Cards
	IKEGAMI GFPAK
	JVC (AVC HD models)





	Inputs
	NextoDI NSB-25
	Panasonic CX350 HEVC
	Panasonic AU-EVA1 and GH5 Cameras
	Multi Clip/Spanned XDCAM/XAVC/XDCAM-EX Structure
	DJI (Camera Drones)
	HLS Structures
	MPEG-TS Structures
	XAVC Structures
	XDCAM EX
	Sony SxS (SBAC-UT100, SBAC-US10/20/30)
	Sony XQD (MRW E-80, MRW E-90)
	XDCAM HD
	Sony XDCAM HD: Disc (PDW-U1, PDW-U2, PDW-U4)
	Panasonic P2
	AJ-PCD 2 / AJ-PCD 20/30/35 / AJ-MPD1
	AU-XPD1E / AU-XPD3EJ
	Network
	XDCAM Network
OnPrem	P2 Network
	ARRI RAW Network
	Ikegami Network
	Storage
	Avid ISIS / Nexis
	Avid Unity™ MediaNetwork
	DDP – Dynamic Drive Pool
	Facilis TerraBlock
	Harmonic MediaGrid
	Editshare EFS
	NAS / SAS (SMB 2.0 and 3.0)
	Quantum StorNext
	ScaleLogic NX2 & ZX NAS Storage
	EMC Isilon
	QNAP
	Studio Network Solutions EVO
	Oracle Storage
	Netapp
	Social Media
	Facebook
	X (Twitter)
	Vimeo
	YouTube
	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 Cocale Prive
	Google Drive
	Microsoft One Drive





## **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
Claud	Microsoft Azure Storage
Cloud	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)
	Support for 8, 10 and 12 bits
	Streams
	Video Content Hyperlinks
	HLS
	MPEG-TS
	MPEG-DASH
Live	RTMP (with support for HEVC / VP9 / AV1)
	RTP
	RTSP
	NewTek NDI
	UDP
	Haivision SRT
	WebRTC
	Zixi
	Audio
	Dante audio *Negotiated separately





	Inputs
	Social Media
	Facebook
	Twitch
	X (Twitter)
	YouTube
Live	IP Live *Optional
	ST2022-6
	ST2022-7
	ST2110-10, ST2110-20, ST2110-21, ST2110-30, ST2110-31
	ST2110-40
	ST2110 - NMOS IS-04 and IS-05 support

## **Supported Live Outputs**

	Outputs
	SDI
	SD-SDI (SMPTE 259M)
	3G-SDI (SMPTE 292M, SMPTE296M, SMPTE372M, SMPTE425M)
	Support for 8, 10 and 12 bits
	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
Live	UDP
2.110	Haivision SRT
	WebRTC
	Vizzi
	Live Output
	Social Media *Optional
	Facebook
	Twitch
	X (Twitter)
	YouTube
	Vimeo
	Multiple and Adaptive bitrates for the OTT *Optional
	IP Live *Optional
	ST2022-7
	ST2110-10, ST2110-20, ST2110-21, ST2110-30, ST2110-31
	ST2110-40

## **Formats**

## **Input Formats**

Input Video Formats
ARRI ARRIRAW
Digital Cinema Packages (DCP)
RED Digital Cinema
IMX 30/40/50 Mbps
MPEG2 LGOP 18/25/35 Mbps 4:2:0
MPEG2 LGOP 50/70 Mbps 4:2:2
MPEG2 LGOP 422 50 Mbps
MPEG2 LGOP 420 1440x1080 35 Mbps
MPEG2 LGOP 420 (FULL) 35 Mbps
DVCAM 25 Mbps
XAVC Intra 50 / 100 Mbps
XAVC LGOP 25 / 35 / 50 Mbps
DVCPRO 25/50 Mbps / DVCPRO HD 100 Mbps





Input Video Formats
AVC-Intra 50/100 Mbps
AVC-Intra 200 Mbps
DNxHD (SQ/HQ/HQX/LB)
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 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
ProRes 422 (SQ/HQ/LT)
JPEG 2000 (Full HD)
Google® VP6 / VP7 / VP8 / VP9 (Full HD)
Uncompressed UYVY 422 / V210 / RGBA
AOMedia Video 1 (Full HD)
IMF (JPEG 2000 @ Full HD)

## **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
AVC-Intra 200 Mbps
AVC Ultra (LGOP 6/12/25/50 Mbps)
DNxHD (SQ/HQ/HQX/LB)
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 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





Output Video Formats
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
NDI HX H.264 - High Profile
NDI HX H.265 - High Profile
MPEG-5 EVC Main Profile
MPEG VVC/H266 Main Profile
ProRes 422 (SQ/HQ/LT)
Google® VP6 / VP7 / VP8
MF (JPEG 2000 @ Full HD)

## Proxy Formats \*

H.264 @ 500 Kbps Flash
H.264 @ 486p 1 / 1.5 Mbps Flash
H.264 360p @ 1.6 Mbps Flash
H.264 720 480p @ 8 / 10 Mbps Flash
H.264 720p @ 8 / 15 / 16 / 20 / 24 / 25 Mbps Flash
H.264 854 480p @ 8 / 10 Mbps Flash
H.264 960 540p @ 3 Mbps Flash
H.264 1080p @ 8 / 15 / 16 / 20 / 24 / 25 Mbps Flash
H.264 SD @ 4 / 8 / 15 / 20 / 25 Mbps
H.264 480p @ 0.5 - 2 Mbps High Profile (Live)
H.264 360p @ 0.4 - 1 Mbps High Profile (Live)
H.264 240p @ 0.3 - 0.7 Mbps High Profile (Live)
ProRes Proxy 1920x1080
ProRes Proxy 1280x720
ProRes Proxy 960x540
ProRes Proxy SD (16:9 Raster)
ProRes Proxy SD
MPEG-1 (layer 2) @ 1.5 Mbps
Avid MPEG-2 (SIF @ 2Mbps)
H.264 Interplay Web (SD, 800 Kbps, and 2 Mbps)
Sony Proxy AV (MPEG-4 Part-2) @1.5 Mbps

<sup>\*</sup> Optional output

## OTT Formats \*

A
Output OTT Formats
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 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





Output OTT Formats
H.265/HEVC 50 Mbps LGOP
H.265/HEVC 100 Mbps LGOP
1.265/HEVC LGOP 4:2:2
Google® VP9 (Full HD)
Google® VP9 (4K)
Optional output

## **Product Integrations**

Editing Sytems	MAM / PAM / DAM	Stream	CDN's
Adobe Premiere Pro	CatDV MAM	Newtek NDI	Lumen
AVID Media Composer	CatDV PAM	Haivision SRT	Fastly
AVID Media Central UX	CatDV DAM	Zixi	Akamai Technologies
AVID Media Central Cloud UX	eMAM Media Asset Management	Consumer Cloud Storages	Microsoft Azure
Apple Final Cut Pro X	Telestream: Masstech	Dropbox	Cloudflare
Edius: Pro 8, Workgroup 9	AVID Interplay	Google Drive	Limelight Networks
BlackMagic: DaVinci Resolve Studio	AXLE MAM	Microsoft One Drive	Amazon CloudFront
Autodesk: Flame	Editshare Flow	Apple I Cloud Drive	BootstrapCDN
Storage	MOG Vizzi	VTR Decks	StackPath
AVID ISIS Storage	Medialoopster MAM	XDCAM HD: Disc (PDW 1500)	KeyCDN
AVID Nexis Storage	Professional Cloud Storages	XDCAM HD: Disc (PDW HD1500)	Rackspace
Avid Unity™ MediaNetwork	Adobe Creative Cloud	XDCAM HD: Disc (PDW F70)	Alibaba Cloud Content Delivery Service
Dynamic Drive Pool SAN Storage	Amazon EC2	XDCAM Station (XDS1000)	CacheFly
Facilis Terrablock	Amazon S3	Cameras	Verizon
Harmonic MediaGrid	Amazon S3 Glacier	Canon: DSLR 5D, DSLR 7D	Hypervisers
Quantum: Storenext	Microsoft Azure Storage	Canon: DSLR C100, C300	Microsoft HyperV
Scalelogic: NX2 & ZX NAS Storage	Microsoft Azure Virtual Machines	ARRI: Alexa XT (ARRIRAW)	VMWare ESX
Editshare EFS	Tencent: Cloud Storage	Panasonic AU-EVA1, GH5 Cameras	Social Media *Optional
EMC: Isilon	Lucidlink Cloud NAS	Panasonic CX350 HEVC	Facebook
QNAP	Google Cloud Storage	Panasonic PTZ Cameras	Twitch
Studio Network Solutions: EVO	IBM Cloud Object Storage	Ikegami Gfpack	X (Twitter)
Oracle Storage	Generic S3	JVC: AVC HD camera models	YouTube
Netapp	Peripheral Devices	LUMIX DC-S1H	Vimeo
Audio	Countour Shuttle Pro V2	NewTek PTZ3, PTZ3 UHD Camera	
Dante *Negotiated separately	Elgato Stream Deck	RED Digital Cinema	
		GOPRO	





## **Server Options**

	Features		Specs
	Platform		Densu 2U
Ē	Video IO		2x DeckLink miniDuo2
System	Storage Drive		6TB or 12TB SSD**
ર્જ	Operating System	Drive	480GB
	Operating System		Windows 10 Enterprise (LTSC)
	Networking	1Gb Ethernet Port	2
	Networking	2.5Gb Ethernet Port	2
	Video	Display Port	2
	Video	HDMI	2
	USB	2.0	4
	036	3.0	8
/ity	HD BNC I/O		8
cţi	Ref. In		2
Connectivity	Live IP Port**		2
ပိ	LTC Input		2
	Audio Output		2
	Breakout Connecto	or	2
	Power Requiremen	ts	Dual 300W
		RS422	8
	<b>Breakout Cable</b>	GPO branch with 4 outputs	2
		GPI branch with 4 inputs	2
	Dimensions & Weight		2RU, 245x484x89mm (D, W, H), ~14Kg
	Delivery Packaging	l	580x380x250mm (D, W, H), ~15Kg
Other	Temperature	Storage**	-40°C to 65°C (-40°F to 149°F)
ᅙ	remperature	<b>Continuous Operation</b>	10°C to 32°C (50°F to 89.6°F)
	What is Included	Power Cable	2x C13 to C14
	TTHAT IS IIICIUUEU	Other	4x rack mount screws

<sup>\*\*</sup> Not included by default

## **Concurrent Media Operations**

With mPORT Densu 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, playback, live video streams, file preview, live channel switching, and intercom.

It 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				
Record / Live Video Stream Playback File Preview Live Switch Intercom				
Up to 4 live channels *	Up to 4 playback files *	Up to 5 files preview	Up to 1 operation	Up to 1 operation

<sup>\*</sup> When using operations dependent on SDI video inputs and outputs, the physical limit of the video card ports must be respected. Thus, the sum of these operations cannot be greater than 8.

## **Product**

Part Number	Product	Description	
mtdnio	mPORT Densu io	Appliance for hybrid workflows of up to 8 combined media operations	





## **Available Options**

Choose from the products below to customize the mPORT Densu io according to your business rules.

#### **Production Tool**

Tool for asset management and workflow orchestration.



#### mPLAN

Setup scheduled events not only from the standard scheduler but through a unique roll out view interface. mPLAN is a tool that maintains a single rollout view of all scheduled events, allowing the management of the ingests process very efficiently. It manages multiple scheduled events across a variety of recording platforms in a multichannel environment using router control cross-points.

Part Number	Product	Description
mpla8c	mPLAN	Scheduler & Router Control of up to 8 channels

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

#### Add-ons

Output options to complement your workflows.

Part Number	Product	Description
s2ioiplk	IP live kit	IP media production infrastructure
dnpa	Proxy generation	Simultaneous proxy creation
dnoa	OTT live ingest	Multiple output resolutions for OTT
dnsa	Social media sharing	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.



#### 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.

#### Storage

Option for local storage.

Part Number		Description	
r2ssd6x1	6TB of SSD storage		
r2ssd6x2	12TB of SSD storage		

Contact our sales team at <a href="mailto:sales@mog-technologies.com">sales@mog-technologies.com</a> to find out how to purchase or in case you need more information.

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