



mREC Densu io

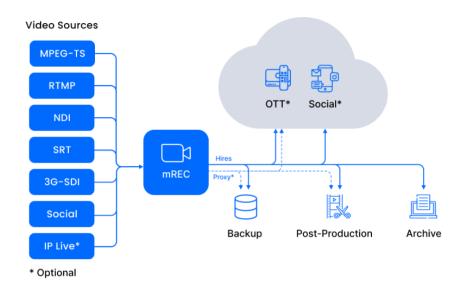


Overview

mREC Densu io is a powerful and flexible multi-format recording compact appliance that optimizes media creativity for enterprise, digital media, sports, and broadcast markets with a streamlined file-based capture system, with full support for recording FHD and HDR live video channels in different file formats.

It supports simultaneous media operations that can be a combination of recording and previewing files.

Additionally, mREC Densu io comes with a redundant power supply and can be pre-configured to support IP Live workflows. It also offers the possibility of adding local storage for greater flexibility and increased capacity.



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 •
- mTALK Audio communication between users
- Full featured remote and local user interface
- Multi-configuration metadata management
- Flexible file naming engine
 - Enable edit while ingest

Specially Designed For

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

- Mobile Studios/OB Vans
- Digitalization
- Post-Production
- Broadcast/Digital News
- System Integrators/Rentals





Features Timecode support LTC (SMPTE 12M) VITC (SMPTE RP188) Time of Day Serial Control Protocols 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 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 **Video Router Protocols** Quartz Probel SW-P-08 Jupiter ASCII Blackmagic Videohub Ethernet Protocol **Operation modes** Automatic Manual Scheduled





Clipnaming

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

"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

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

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)

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

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

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

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

Perform captures from a MOG S1000

Perform captures from an Airspeed 5000

Perform captures from a Softron Movie Recorder

Signal error detection and related recovery actions

Detect possible signal errors

Detect possible drop frames

Support for timecode breaks

Configurable capture resume methodology

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

Checksum media

MD5 hash file

MDL - Media hash list

Live to Live

Delete artifacts on abort

Vizzi OTT Live Output

Multiple resolutions check-in

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

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

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

Stream ID support

Configurable latency settings

Configurable overhead bandwidth

Configurable passphrase

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

Timecode and metadata overlaying on SDI out

Playout

Print to tape

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

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

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

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





Features
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
	SD/HD/FHD-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
	RTMP (with support for HEVC / VP9 / AV1)
	RTP
	RTSP
	NewTek NDI
	UDP
Live	Haivision SRT
2.70	WebRTC
	Zixi
	Audio
	Dante Audio *Negotiated separately
	Social Media
	Facebook
	Twitch
	X (Twitter)
	YouTube
	IP Live *Optional
	ST2022-6
	ST2022-7
	ST2110-10, ST2110-20, ST2110-21, ST2110-30, ST2110-31
	ST2110-40
	ST2110 - NMOS IS-04 and IS-05 support





Supported Live Outputs

	Outputs
	Vizzi
	Live Output
	Social Media *Optional
	Facebook
Live	Twitch
	X (Twitter)
	Vimeo
	YouTube
	Multiple and Adaptive bitrates for the OTT *Optional

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
OliPielli	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
Cioda	Tencent
	Lucidlink Cloud NAS
	Google Cloud Storage
	IBM Cloud Object Storage
	Generic S3 storages
	Social Media *Optional
	Facebook
	X (Twitter)
	Vimeo
	YouTube

Formats

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	





Output Video Formats
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
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 VVC/H266 Main Profile
ProRes 422 (SQ/HQ/LT)
Google® VP6 / VP7 / VP8
Uncompressed UYVY 422 / V210 / RGBA
AOMedia Video 1 (Full HD)
IMF (JPEG 2000 @ Full HD)

Proxy Formats *

Output 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





Output Proxy Formats	
roRes Proxy SD (16:9 Raster)	
roRes Proxy SD	
PEG-1 (layer 2) @ 1.5 Mbps	
vid MPEG-2 (SIF @ 2Mbps)	
.264 Interplay Web (SD, 800 Kbps, and 2 Mbps)	
ony Proxy AV (MPEG-4 Part-2) @1.5 Mbps	

^{*} Optional output

OTT Formats *

H.264 1080p 8 - 12 Mbps High Profile H.264 720p 5 - 7.5 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 720p 1.5 - 6 Mbps High Profile (Live) H.264 360p 0.5 - 2.0 Mbps High Profile (Live) H.264 360p 0.4 - 1.0 Mbps High Profile (Live) H.264 360p 0.4 - 1.0 Mbps High Profile (Live) H.264 360p 0.8 - 0.7 Mbps High Profile (Live) H.264 360p CBR MAIN Profile H.264 372p CBR MAIN Profile H.264 576p CBR MAIN Profile H.264 576p CBR MAIN Profile H.264 720p CBR MAIN Profile H.264 720p CBR MAIN Profile H.264 1080p CBR - 3 Mbps MAIN Profile H.264 720p CBR - 4 Mbps MAIN Profile H.264 1080p CBR - 5 Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 50 Mbps LGOP H.265/HEVC 50 Mbps LGOP	Output OTT Formata
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 360p 0.4 - 1.0 Mbps High Profile (Live) H.264 360p 0.4 - 1.0 Mbps High Profile (Live) H.264 360p CBR MAIN Profile H.264 370p CBR MAIN Profile H.264 370p CBR MAIN Profile H.264 576p CBR MAIN Profile H.264 576p CBR MAIN Profile H.264 720p CBR MAIN Profile H.264 720p CBR MAIN Profile H.264 720p CBR - 3 Mbps MAIN Profile H.264 720p CBR - 4 Mbps MAIN Profile H.264 720p CBR - 5 Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 5 Mbps LGOP H.265/HEVC 5 Mbps LGOP	Output OTT Formats
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 376p CBR MAIN Profile H.264 720p CBR AIN Profile H.264 720p CBR - 3 Mbps MAIN Profile H.264 720p CBR - 4 Mbps MAIN Profile H.264 720p CBR - 5 Mbps MAIN Profile H.264 720p CBR - 5 Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 50 Mbps LGOP	
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 360p 0.4 - 1.0 Mbps High Profile (Live) H.264 360p CBR MAIN Profile H.264 360p CBR MAIN Profile H.264 376p CBR MAIN Profile H.264 7720p CBR - 3 Mbps MAIN Profile H.264 7720p CBR - 4 Mbps MAIN Profile H.264 7720p CBR - 5 Mbps MAIN Profile H.264 7720p CBR - 5 Mbps MAIN Profile H.264 1080p CBR - 5 Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 25 Mbps LGOP	
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 370p CBR MAIN Profile H.264 432p CBR MAIN Profile H.264 720p CBR MAIN Profile H.264 720p CBR MAIN Profile H.264 1080p CBR MAIN Profile H.264 76p CBR - 3 Mbps MAIN Profile H.264 76p CBR - 3 Mbps MAIN Profile H.264 70p CBR - 4 Mbps MAIN Profile H.264 1080p CBR - 5 Mbps MAIN Profile H.264 1080p CBR - 5 Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 50 Mbps LGOP H.265/HEVC 10 Mbps LGOP	H.264 480p 2.5 - 4 Mbps High Profile
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 432p CBR MAIN Profile H.264 576p CBR MAIN Profile H.264 720p CBR MAIN Profile H.264 720p CBR MAIN Profile H.264 76p CBR - 3 Mbps MAIN Profile H.264 76p CBR - 5 Mbps MAIN Profile H.264 76p CBR - 5 Mbps MAIN Profile H.264 76p CBR - 5 Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 25 Mbps LGOP H.265/HEVC 50 Mbps LGOP	H.264 360p 1 - 1.5 Mbps High Profile
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 - 3 Mbps MAIN Profile H.264 720p CBR - 4 Mbps MAIN Profile H.264 720p CBR - 5 Mbps MAIN Profile H.264 720p CBR - 5 Mbps 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.264 1080p 3 - 9 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 720p CBR MAIN Profile H.264 720p CBR MAIN Profile H.264 770p CBR MAIN Profile H.264 576p CBR - 3 Mbps MAIN Profile H.264 576p CBR - 3 Mbps MAIN Profile H.264 720p CBR - 4 Mbps MAIN Profile H.264 720p CBR - 5Mbps MAIN Profile H.264 720p CBR - 5Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 50 Mbps LGOP H.265/HEVC 50 Mbps LGOP H.265/HEVC 100 Mbps LGOP	H.264 720p 1.5 - 6 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 756p CBR - 3 Mbps MAIN Profile H.264 720p CBR - 4 Mbps MAIN Profile H.264 720p CBR - 5 Mbps MAIN Profile H.264 720p CBR - 5 Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 50 Mbps LGOP H.265/HEVC 100 Mbps LGOP H.265/HEVC 100 Mbps LGOP	H.264 480p 0.5 - 2.0 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 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 720p CBR - 5 Mbps MAIN Profile H.264 720p CBR - 5 Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 50 Mbps LGOP H.265/HEVC 50 Mbps LGOP H.265/HEVC 50 Mbps LGOP	H.264 360p 0.4 - 1.0 Mbps High Profile (Live)
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 720p CBR - 5 Mbps MAIN Profile H.264 720p CBR - 5 Mbps MAIN Profile H.264 1080p CBR - 5 Mbps MAIN Profile H.265/HEVC 10 Mbps LGOP H.265/HEVC 25 Mbps LGOP H.265/HEVC 50 Mbps LGOP H.265/HEVC 50 Mbps LGOP	H.264 240p 0.3 - 0.7 Mbps High Profile (Live)
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 720p CBR - 5 Mbps MAIN Profile H.264 1080p CBR - 5 Mbps 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.264 360p 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.264 432p 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.264 576p 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.264 720p CBR 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.264 1080p CBR 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.264 576p CBR - 3 Mbps 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.264 720p CBR - 4 Mbps MAIN Profile
H.265/HEVC 25 Mbps LGOP H.265/HEVC 50 Mbps LGOP H.265/HEVC 100 Mbps LGOP	H.264 1080p CBR - 5Mbps MAIN Profile
H.265/HEVC 50 Mbps LGOP H.265/HEVC 100 Mbps LGOP	H.265/HEVC 10 Mbps LGOP
H.265/HEVC 100 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	H.265/HEVC LGOP 4:2:2
Google® VP9 (Full HD)	Google® VP9 (Full HD)
Google® VP9 (4K)	Google® VP9 (4K)

^{*} Optional output

Product Integrations

Editing Sytems	MAM / PAM / DAM	Stream	CDN's
Adobe Premiere Pro	CatDV MAM, PAM, DAM	Newtek NDI	Lumen
AVID Media Composer	eMAM Media Asset Management	Haivision SRT	Fastly
AVID Media Central UX	Telestream: Masstech	Zixi	Akamai Technologies
AVID Media Central Cloud UX	AVID Interplay	Consumer Cloud Storages	Microsoft Azure
Apple Final Cut Pro X	AVID Media Central UX	Dropbox	Cloudflare
Edius: Pro 8, Workgroup 9	AVID Media Central Cloud UX	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 UnityTM 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	Panasonic PTZ Cameras	Hypervisers
Quantum: Storenext	Microsoft Azure Storage	NewTek PTZ3 UHD Camera	Microsoft HyperV
Scalelogic: NX2 & ZX NAS Storage	Microsoft Azure Virtual Machines	NewTek PTZ3 Camera	VMWare ESX
Editshare EFS	Tencent: Cloud Storage	Social Media *Optional	Peripheral Devices
EMC: Isilon	Lucidlink Cloud NAS	Facebook	Countour Shuttle Pro V2
QNAP	Google Cloud Storage	Twitch	Elgato Stream Deck
Studio Network Solutions: EVO	IBM Cloud Object Storage	X (Twitter)	Audio
Oracle Storage	Generic S3	YouTube	Dante *Negotiated separately
Netapp		Vimeo	





Server Options

Features		atures	Specs
	Platform		Densu 2U
tem	Video IO		2x DeckLink miniDuo2
System	Operating System Drive		480GB
0,	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
Connectivity	036	3.0	8
Ject	HD BNC In		8
one.	Ref. In		2
0	Live IP Port**		2
	LTC Input		2
	Audio Output		2
	Breakout Connector		2
	Power Requirements		Dual 300W
		RS422	8
	Breakout Cable	GPO branch with 4 outputs	2
		GPI branch with 4 inputs	2
	Dimensions & Weight		2RU, 245x484x89mm (D, W, H), ~14Kg
	Delivery Packaging		580x380x250mm (D, W, H), ~15Kg
Other	Temperature	Storage**	-40°C to 65°C (-40°F to 149°F)
ᅙ		Continuous Operation	10°C to 32°C (50°F to 89.6°F)
	What is Included	Power Cable	2x C13 to C14
_		Other	4x rack mount screws

^{**} Not included by default

Concurrent Media Operations

With mREC Densu io, it is possible to run different media operations simultaneously, thus guaranteeing a universe of distinct arrangements to meet the challenging media day-to-day activities.

Media operations include recording, file preview, live channel switching, and intercom.

mREC Densu 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				
Record File Preview		Live Switch	Intercom	
Up to 8 live channels	Up to 5 files preview	Up to 1 operation	Up to 1 operation	

Product

Part Number	Product	Description
mrdnio	mREC Densu io	Compact video file recording appliance of up to 8 combined media operations





Available Options

Choose from the products below to customize the mREC Densu 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.

Add-ons

Output options to complement your workflows.

Part Number	Product	Description
dnpa	Proxy generation	Simultaneous proxy creation
dnoa	OTT live ingest	Multiple output resolutions for OTT
dnsa	Social media sharing	Simultaneous social media shares
-	IP live card	IP media production infrastructure

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.

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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