

REG-1024



High Density

Up to 10 channels ST2110/SDI in a 2RU

High Security

Data encryption & user signature for secure media exchange

High Availability

Onboard NVMe with multi-level data protection

Easy to Use

Plug-and-play SSD with metadata

REG-1024

☆ Product Overview

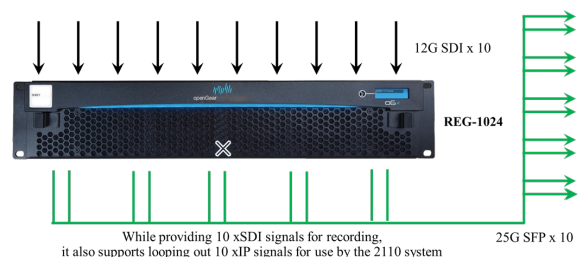
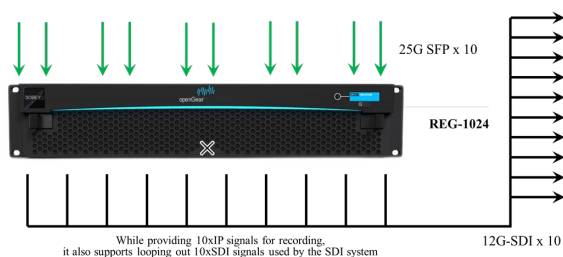
REG-1024 is a high-density embedded SDI video recorder recording unit, suitable for multi-channel recording scenarios such as sports events, variety shows, galas, and large-scale reports. The product features the following main functions:

1. Support high-density recording, achieving the recording of 10 4K ST 2110 or SDI channels within a 2RU device space. Additionally, it integrates the function of an IP gateway, allowing for the loop-out of SDI signals when recording IP signals, or the loop-out of IP signals when recording SDI signals.
2. When paired with storage nodes or shared storage, it can ensure secure indexing while seamlessly integrating with related systems.

📋 Scenarios

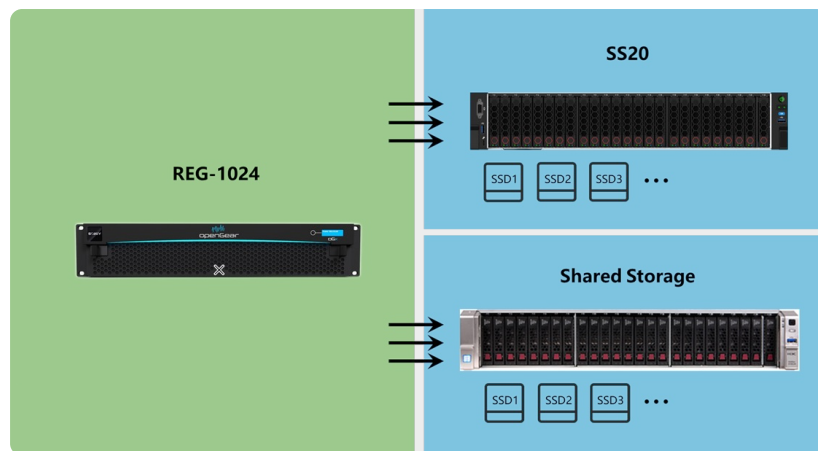
High-density Recording

- In scenarios such as sports events, variety shows, galas, and large-scale reporting, achieving as much recording as possible within a limited space, namely high-density recording, is an important feature of current large-scale multi-channel recording systems.
- REG-1024 supports the implementation of 10 4K channels in a 2RU equipment space, and simultaneously loops out 10 SDI/IP signals for use by other devices. When 10 IP signals are input, it supports looping out 10 SDI signals for use by the SDI system; when 10 SDI signals are input, it supports looping out 10 IP signals for use by the 2110 system.

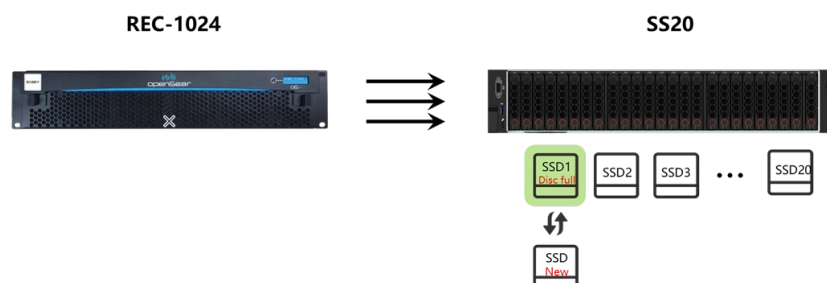


Safe and Convenient Exchange of Ingested Content

- While meeting the requirements of high-density recording, the multi-channel recording system should also ensure the safety and reliability of the recorded content, and the recorded file content can be easily exchanged with production and broadcasting systems.
- REG-1024 supports mounting storage units or shared storage. When recording files, the content is directly written to the corresponding individual pluggable SSD storage medium. At the same time, each REG-1024 recording unit comes with its own storage, providing 4TB of local recording space. The recording unit can be used independently or for centralized storage backup to ensure the safety of recorded content.



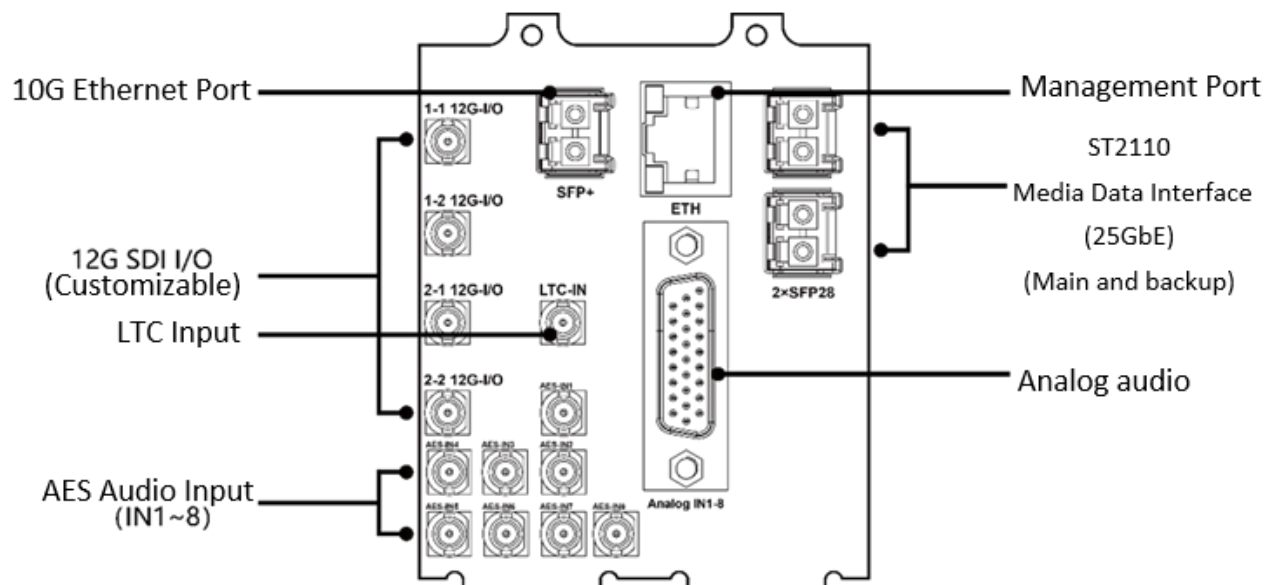
- When the recording unit is used in conjunction with the storage node SS20, data specifications such as open storage disk information, metadata of audio and video files, and tags of audio and video clips facilitate the exchange with other systems through pluggable storage media. At the same time, it can also seamlessly interface with the production system through shared storage.



Rich recording functions It can be adapted to different scenarios

- Supports multiple collection methods such as manual, scheduled, and playlist-based
- Support cluster indexing and unified clock tagging
- Support binding the input AES audio to the input video for recording
- Support automatic timing segmentation of recorded files
- Supports multiple control methods, including shortcut keys, keyboard and mouse, and remote control panel
- It supports the use of multiple split screens for monitoring, and the output supports SDI interface

Device Interface



Technical Specification

Input/output

Media Data Interface	25G SFP28 x 2
SDI Interface	12G SDI x 4 (4IN/OUT)
Analog Audio	DB26 x 1, 8 channels
Audio	BNC x 8, 16 channels
LTC	LTC In x 1
10 Gigabit Ethernet Port	SFP+ x 1
Management Port	RJ-45 x 1

Video Format

4K	3840 x 2160 60p/59.94p/50p
HD	1920 x 1080 60p/59.94p/50p/59.94i/50i

Supported Transmission Protocols and Standards

SMPTE	SMPTE ST 2110-10/20/21/30/40, SMPTE ST 2022-7
NMOS	NMOS IS-04/05

Clock Synchronization

SMPTE ST 2059 PTP clock

Encoding Format

4K	SUVC, H.264, H.265, AVS-HFM, DNxHR (HQ, SQ, LB), ProRes (HQ, 422, LT, Proxy), XAVC (Class 300 CBG/VBR, Class 480 CBG/VBR)
HD	NMOS IS-04/05

File Format

4K	MXF, MOV, MP4
HD	MXF, MOV, MP4

Storage

Storage Capacity	4TB
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Number of slots

4 slots

Main Function

Supports 4K/HD signal recording, configurable as 2-channel IP, 2-channel SDI, or 1-channel SDI + 1-channel IP

Supports SUVC, XAVC, AVS-HFM, ProRes, DNxHR, DNxHD, H.264, and H.265 encoding formats

Supports SDI loop-through, allowing access to multiple screens for monitoring

Support binding the input AES audio to the input video for recording

Supports multiple collection methods such as manual, scheduled, and playlist-based

Support cluster indexing and apply clock tags uniformly

Support open format metadata recording, including format information, intelligent recognition tags, etc., which can be used for rapid exchange of collected materials

Support automatic timing segmentation of recorded files

Recording supports mirroring and dual-writing, which means that a piece of encoded data is simultaneously recorded to both the local and storage nodes (or shared storage), serving as backups for each other

Adopting BS control interface, it can be extended to support control panels

Chassis Configuration

Number of Slots	20
Power Supply	100V to 240V AC, 50/60 Hz
Power Consumption	600W
Temperature Range	0°C- 40°C
Dimensions (W x H x D, mm)	483 x 90 x 427
Redundant Power Supply	

Optional: Multi-screen Monitoring Card

SDI Interface: 12G SDI x 20 (16IN), 4 slots

Supports up to 16-channel video monitoring