

The Benefits of Etere Full IP Payout

More than just an IP-based replacement for SDI, Etere's complete IP solution is a bi-directional transmission, enabling you to share video and audio over IP and send and receive multiple input and output signals between devices on your network.



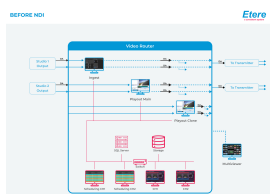
Etere logo

SDI	ETX-M
Requires dedicated hardware for SDI connections	Uses IP for all connections without a change to the system
Requires SDI connections and hardware for each channel	Requires only standard Gigabit cables
Higher costs for SDI connections and hardware	Highly cost efficient
Not all SDI connections can be used for multiple channels	Transmits, receives and processes multiple streams of video and audio simultaneously
High bandwidth consumption. Transmission for each channel requires separate hardware	Uses bandwidth compression. Approximate bandwidth required is 100Mbps per channel
SDI signal is dependent on cable length	Low CPU impact
A change in configuration requires a hardware change	Independence of changing specifications and formats, open to future standards
Requires dedicated hardware and connections for each channel	Fast and easy software based upgradeability, with regular patches and updates protective of change
Hardware for SDI connections is expensive, and can be difficult to maintain	Uses IP for all connections, which is a software that allows you to change and adapt your broadcast and IP connections

IP over SDI

Example ETX with NDI video stream	Approximate Bandwidth Required
1 x UHDp60 video stream	250 Mbps
1 x UHDp30 video stream	200 Mbps
1 x 1080p60 video stream	125 Mbps
1 x 1080p30 video stream	100 Mbps
1 x 720p60 video stream	90 Mbps
1 x SD video stream	20 Mbps

Bandwidth



Traditional setup

Etere's complete IP payout solution is scalable, easy to manage, and cost-effective. It is a complete solution that includes Ingest, Media Asset Management (MAM), Transcoding, Quality Control, Payout, Graphics, Etere ETX-M IP Multiviewer and Closed Caption capabilities. With Etere, you can build an IP facility that does not require any SDI hardware and is less expensive than a traditional solution. Etere has supported Newtek technology since 2014, when its IT-based channel-in-a-box system, Etere ETX, was integrated with NDI support.

Ready for Virtual Machines (VM)

Etere IP technology allows you to use virtual machines. Only the ETX-M IP Multiviewer requires SDI cards. You can have a virtual environment to manage your MAM, ingest, transcode and payout with cost savings in hardware and maintenance costs.

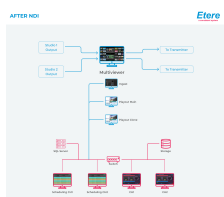
Performance and Flexibility

- Latency compression for SD, HD and 4K video, audio and metadata
- Encode, transmit and receive multiple streams of video and audio in real-time
- Manages multiple high-quality and ultra-low latency video streams simultaneously
- Low bandwidth consumption and CPU impact
- Point-to-point IP connection with failover and automatic re-connection
- Video data compression with the NDI codec, which delivers 1080 full HD video at VBR data rates of around 100mBit/seconds
- Full resolution, full frame-rate video suitable for limited bandwidth wireless, remote and large-scale networks
- Redundant with the use of standard IP adapters
- Easy migration without hardware requirements
- Requires only standard Gigabit cables, freedom from dependency on distribution amps, video matrix routers

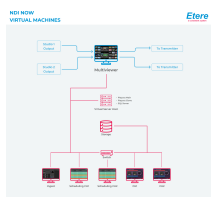
Etere Ecosystem

Etere complete IP solution is integrative with **Etere Ecosystem**. From planning to sales, **Etere Ecosystem** can connect, integrate and provide real-time updates from a centralised database

- Etere ETX-M can monitor multiple live video input sources for a simultaneous broadcast from a single interface
- Live subtitling with Etere ETX Inserter and Time Delay
- Etere ETX is a complete channel-in-a-box with full IP in and out capabilities
- Etere ETX-G allows you to add or delete graphics up to 30 seconds before payout
- Etere QC for an automated quality check on video/audio files and detection for issues, including freeze frames, black frames, scene changes and audio loss
- Etere Master Control modernises all master control features in a 100% software-based solution with a touchscreen panel



Etere Solution Workflow



Virtual Machines

Future-Ready Solution

- Easy to expand and completely scalable without a change in the system
- Open to the future, it is capable of managing SD/HD/4K signals
- Ready for Virtual Machines and Cloud
- Compatible with existing SDI and IP-based technologies, independent of changing specifications and formats
- Supports integration with ASPEN, SMPTE 2110 and other emerging standards