

## FM/MPX signal over IP transmitter

IQOYA X/LINK-MPX is a 1U rack IP codec designed for transporting an FM/MPX composite signal over IP networks. The MPX input signal can be analog, digital or RAVENNA, and the MPX output signal can be analog and/or digital. IQOYA includes a rich set of features enabling the reliable transport of the MPX signal over managed or unmanaged networks, and also ensures continuity of audio service on transmitter sites thanks to two backup levels (secondary MPX IP stream, MPX file on SD card). Built on a powerful, fan-less and energy-efficient hardware platform that runs on the acclaimed Digigram Fluid IP streaming technology, IQOYA X/LINK-MPX is designed for 24/7/365 operation.

SDHC card reader backup playlists, and loading/saving the codec configuration.

Easy status monitoring: status LEDs, LCD display and keypad, vu-meters, headphones.

Low consumption, fanless, multi-format encoding and multi-protocol streaming



1 digital MPX input and 1 digital MPX output

2 analog audio I/Os and 1 AES/EBU audio I/O, Plus 10 MHz/1 PPS synchronization inputs

2 internal redundant PSUs for secure operations.



1 analog MPX input and 1 analog MPX output

4 GPIO/s for tunneling of physical status.

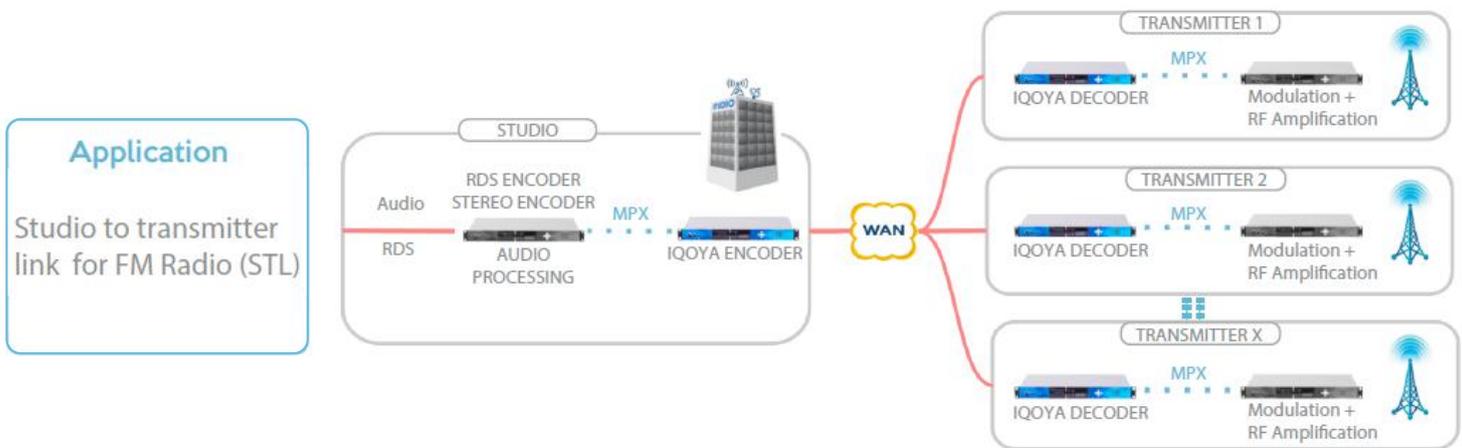
RS 232 port for serial data tunneling

4 network ports for full separation of IP traffics:

- ▶ AeS67, RAVENNA, livewire (LAN)
- ▶ Redundant dual streaming (WAN)
- ▶ Remote management (LAN/WAN)

### Key Points

- ▶ Transport your MPX signal and get a monitoring IP audio stream from your transmitters sites and get return monitoring audio streams from the transmitter sites.
- ▶ Easy integration into existing SNMP based supervisors (SET, GET, Traps)
- ▶ Lower your CAPEX: no need for sound processors, RDS and stereo encoders at transmitter sites.
- ▶ Lower your OPEX: less power consumption, less space required, and less maintenance operations at transmitter sites.



**Application**  
Studio to transmitter link for FM Radio (STL)

GENERAL
2 internal redundant PSUs 100-250VAC (Optional: 100-250VAC/-48vdc) (Max 15W consumption)
4 network ports 1 x 100 Mbps + 3 x Gbps on RJ-45 ports
1 analog MPX input (BNC) and 1 digital MPX input (XLR)
1 analog MPX output (BNC) and 1 digital MPX output (XLR)
2 balanced analog I/Os, and 1 stereo AES/EBU I/O with hardware sample rate converter
4 GPI/4 GPO on Sub-D25
One RS232 port for serial data tunneling

NETWORKING
Possibility to separate the network traffics (WAN, LAN, management) via the 4 network ports
VLANs, QoS (VLAN Tagging, DSCP)
IGMPv2 and V3

ENCODING, DECODING AND STREAMING
MPX transported in RTP/UDP and in PCM 16/20/24 bits
Baseband audio monitoring stream in PCM linear 16/20/24 bits, ISO MPEG-1/2 Layer II, Layer III, MPEG-4 AAC, AAC-LD, HE-AACv2, HE-AACv1, AAC-ELD, Opus
Dual port redundant streaming on WAN, with time diversity up to 3 seconds
Unicast, multicast and multi-unicast
Real-time metrics on network path quality for the primary stream as well as for the FEC/redundant stream.
Selection of FECs (from + 15% + 100% IP bandwidth)

FUNCTIONS
Two backup levels when decoding the MPX IP stream: secondary MPX IP stream on another network port, backup MPX file stored on local SD card
Monitoring on the headphones output of the audio included in the MPX signal
AES transparent transport
Front panel vu-meters to monitor the level of the MPX signal, the level of the baseband audio embedded in the MPX signal, and level of the baseband audio input / output