#### datasheet

# nevion



### FLASHLINK

## AES-IP-MUX Audio over IP multiplexer

# The AES-IP-MUX is an audio over IP product for broadcast infrastructure use.

Its main application is to provide a secure and standardized IP transport network that bridges between base band audio and audio over IP systems. The audio is transported as AES-67 and Nevion's VideolPath management system virtualizes the AES-67 network into a router level to allow broadcast router management systems to control the audio IP network as a standard audio router.

Its encapsulation design is optimized for low and fixed latency in the audio network. The audio signals may be transported completely bit transparently ensuring optimized audio quality and enabling transport of intercom systems utilizing AES.

The board can interface both electrically and optically to LANs.

The product provides routing of audio in the IP layer, and multiple AES-IP-MUXes can be used together as a large distributed audio router.

The card is easy to use with minimum setup needed and broadcast centric control enabled through Nevion's control panel support.

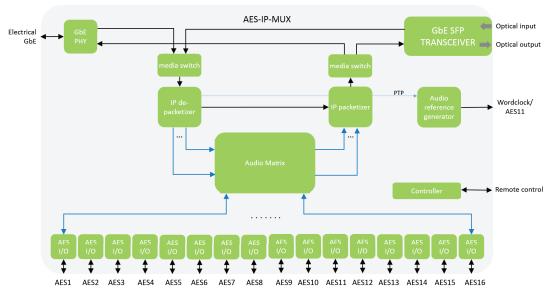
#### Applications

- Digital audio transport and routing on Gigabit LAN
- Audio networking
- Intercom transport

#### **Key features**

- Low latency (down to 250us)
- Fully bit transparent audio transport of all channels
- 16 configurable AES ports
- PTP clock reference
- AES67 compliant stream
- CWDM and DWDM support for long distance transport
- Optics removable with main board without detaching
  fiber connections

## Flashlink AES-IP-MUX





#### Description

The module has 16 AES audio ports which may be used as inputs or outputs, into or from the network. The module uses a central timing reference (PTP). The module encodes linear PCM audio into AES67 packets. The packet times supported are 0.25ms, 0.5ms, 1ms and 4ms. The sample frequency supported is 48 kHz. The audio signals are transported either completely bit transparently AES3 or in a standard 16 or 24 bit packet format.

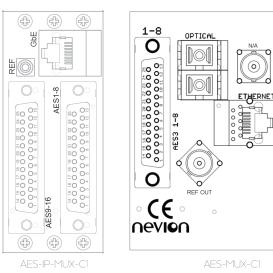
The audio transport has a minimum latency of just over the selected packet time plus the network delay. The latter is usually less than 0.1 ms in a normal gigabit LAN.

The encoding parameters are set on the AES input (ingest) ports and are automatically detected on the output (egress) ports.

The modules are intended to be used in a centrally managed system with out-of-band management. i.e. The routing and configuration are done with the Multicon controller on a separate LAN.

The AES-IP-MUX does not use client-to-client managed routing or session management. Larger systems, spanning multiple audio LANs may be realized with VideoIPath. There are two operational modes for the module. Large systems made be realized using VideolPath. This mode uses Multicon GYDA but the settings of the modules are controlled directly from VideolPath. The Multicon matrix mode can provide up to 128 audio connections. Routing control may be dynamically controlled with hardware router control panels or web panels, or may be static for point to point links.

The modules may also be equipped with an SFP providing optical link capability.



Two backplane types are presently available: Sync output on BNC.



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ES3

#### General

Power	3.4W/5V
User interface	Status LED, Status GPI, configuration DIP switches Web interface and SNMP thru Multicon controller
Operating temperature	0-40C

#### Supported standards

AES3-2003, AES-67, IEEE802.3ab, IEEE802.3z

#### Optical input

No of inputs	1
Signal type	Gigabit Ethernet
Connector	SC/UPC
Optical system	Nevion's optical GbE transceiver SFP range

#### **Optical output**

No of outputs	1
Signal type	Gigabit Ethernet
Connector	SC/UPC
Optical system	Nevion's optical GbE transceiver SFP range

#### Digital audio configurable I/O

No of I/Os	16 (configured in groups of 8)	
Signal type	AES-3	
Connector	2x DB-25F	

#### Digital audio reference

no of outputs	1
signal type	Wordclock / AES11
Connector	BNC - AES-MUX-C1 DIN1.0/2.3 AES-IPMUX-C1'

#### **Electrical Ethernet port**

No of ports	1
Signal type	1Gb Ethernet
Connector	RJ45

#### **Ordering options**

For ordering information please contact product@nevion.com



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