NET - CX

ATEÏS NET SECURED AUDIO NETWORK CARD

ATEÏS Net™ is a secured (monitored) audio network, developed and supplied for fast and low-latency audio and data transport over a redundant copper (CAT-5) or fiber-optic network ring. ATEÏS Net™ has an open-architecture design and interfaces with remote devices such as paging consoles, audio break-in and break-out convertors and room controllers, providing the best solution to medium to large-scale installations, such as shopping malls, retail stores, train stations and airports.

ATEÏS Net™ secured audio network responds to Public Address and Voice Alarm requirements as stated in EN54-16, UL60065, ISO 7240-16 and BS5839/8, with specific attributes for compliance in large installations.

MAIN CHARACTERISTICS

- ATEÏS Net™ audio and data secured network
- Local-net & Global-net
- 32 x 32 IDA8 system units in a Global network
- Low-latency <1ms
- 48-audio channels
- Redundant loop architecture
- 32 bit, 48 kHz sampling
- CAT-5 for up to 100 m
- Fiber-optic multi-mode for up to 2 km
- Fiber-optic single-mode for up to 20 km
- Dedicated network
- EN54-16 certified

FUNCTIONS:

ATEÏS Net™ is able to simultaneously transport 48 audio channels (32 bit, 48 kHz sampling rate) with a latency <1ms together with the necessary control data over a CAT-5 or fiber-optic dedicated network. For LOCAL and GLOBAL system networking, optional ATEÏS Net™ networking cards can be installed into the IDA8 Controller and Slave units. Thanks to its loop architecture, the ATEÏS Net™ audio network is fully redundant. When a fault (line open or shorted) occurs on a loop segment, it will be automatically isolated without affecting the entire system functionality. ATEÏS global-net, can be a network of more than one controller(Matrix Mode and Switch Mode) and a maximum up to 31 IDA8Sxx Slave units (Matrix Mode and Switch Mode) in a local system.

As network addresses are auto negotiated, network setup is very easy. Once programmed, the system will operate independently without connecting to a PC having to be connected. 32 IDA8 system units can be a network in ATEÏS Global-Net, and each system includes one control unit connecting to 31 slave units in ATEÏS Local-Net.

The installation of NET-C1 cards (RJ45 to RJ45) are suitable with a maximum distance up to 100m between Matrix and Slave unit or Slave and Slave unit. For longer installation distances, optional NET-C2, C3 or C4 can be used to extend distances with fiber-optic, up to 2 km between units in multi-mode or 20 km in single-mode.

NET-C1, 2x RJ45 Port A & Port B

Note:
Port A = network IN
Port B = network OUT

NET-C3, 2x fiber Port A & Port B

NET-C4, 1x fiber Port B & 1x RJ45 Port A

NET-C2, 1x RJ45 Port B & 1x fiber Port A

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TECHNICAL SPECIFICATIONS

Electrical

Battery power supply

Voltage	Internal multi-power socket
Power consumption	5 W

Performance

Frequency response	20 Hz ~ 22 kHz
Sampling rate	32 bit / 48 kHz
Latency	< 0.08 ms per node
Integrity assurance	Watchdog

Center Wavelength (Fiber-optic)

Multi-mode	1300 nm
Single-mode	1310 nm

FO connector type	Straight Tip
FO cable baud rate	62.5 um (Multi-mode)
	9 um (Single-mode)

Indicators

LED	Network active
LED	Network present

Mechanical

(H x W x D)	18 x 100 x 150 mm
	(7/10" x 4" x 6")

Environmental

Operating temperature	-5ºC ~ 55ºC (23ºF ~ 131ºF)
Storage temperature	-40ºC ~ 70ºC (-40ºF ~ 158ºF)
Relative humidity	15% to 90%
Air pressure	600 to 1100 h Pa

PARTS INCLUDED

Quantities	Components
1	ATEÏS Net™ secured audio network card
1	Set of interconnecting ribbon cables
1	Set of mounting pillars

SECURITY:

In accordance with EN54-16, UL60065, ISO 7240-16 and BS5839/8, all IDA8 system components and peripherals on the ATEÏS Net™ secured audio network are monitored and reports stored in the IDA8C system controller. The controller monitors the status of all the equipment in the system, reports status changes and stores fault messages for recall either on the controller front-panel display or through the ATEÏS Studio PC-based software.
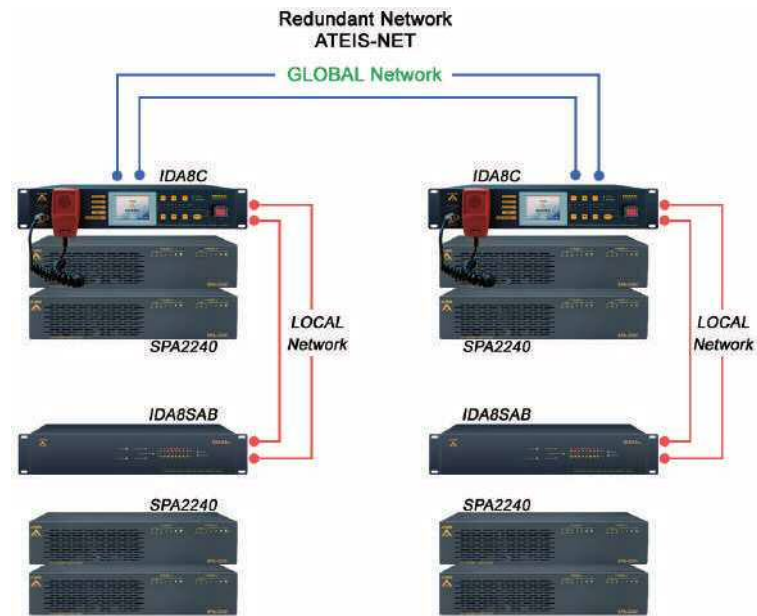
ATEÏS Local Net and ATEÏS Global Net

CONTROLS AND INDICATORS

Front

· Data running indicator
· Net-work present indicator

INTERCONNECTIONS

Front

· Two system network connections either CAT5 or Fiber-optic or a combination

CERTIFICATIONS AND APPROVALS

REGIONAL CERTIFICATIONS

Europe	Voice Alarm	EN54-16 certified 2012
		CE – 0359
		according to EN50130 – 4