# ATEÏS

# DELIVERING YOUR MESSAGE

# **IDA8S**

# NETWORKABLE PAVA SYSTEM – SLAVE UNIT – MATRIX MODE

IDA8 is a third-generation modular system that complies with current architectural demands requiring IP and/or fiberoptic networking to allow for even the most complex of system designs. IDA8S responds to Public Address and Voice Alarm requirements as stated in EN54-16, ISO 7240-16 and BS5839/8, with specific attributes for compliance in large installations.



#### **CONNECTIVITY:**

The IDA8S Slave unit houses advanced audio digital signal processing (DSP), matrix control functions and a digital message player, along with amplifier monitoring for hot-swap amplifiers and loudspeaker line impedance monitoring. It can support up to two PSS-AS monitored microphone consoles and up to eight monitored amplifiers plus two backup amplifiers, paging into 8 different zones per unit with line detection. Featuring 8 monitored zones for 25V/70V/100V outputs with simultaneous selection, control inputs, and contact outputs. IDA8C provides the zones and audio in & out expansion of the IDA8 systems, using a secured 48-channel audio and data network over CAT5 or fiber optic, which can be a network of one controller and a maximum up to 31 Slave units via ATEIS local-net. Two card slots can fitted with optional 4-channel analogue audio input/outputs cards(max two cards per device).

IDA8S Slave units provides extension of IDA8 system configuration with an additional 8 output zones and 2 back-up amplifiers. Each input and output channel is fitted with a wide range of pre- and post-processing devices such as volume controllers, routing mixers and switches, priority and paging components, equalizers, compressors, limiters and delay-lines. Digital messaging (G.711, G.722, G.726, G.727 and WAV format) can be stored for live or pre-recorded playback. Digital audio files are uploaded from a computer to the IDA8S through the user-friendly ATEÏS Studio GUI. Several messages can be played simultaneously into different zones: up to 4 messages from a single IDA8S Slave or a total of 48 message channels across an IDA8 system (controller with slaves).

The IDA8S Slave operates on a 24VDC power supply for emergency back-up, with automatic switchover. The power supplies is monitored. The IDA8S Slave also supports redundant loop network cabling. IDA8S is easily configured using the PC-based ATEÏS Studio global software. Once programmed, the system will operate independently (off-line) without a PC having to be connected.

#### **SECURITY:**

In accordance with EN54-16, ISO 7240-16 and BS5839/8, all IDA8 system com-ponents and peripherals are monitored. This monitoring extends from the capsule of a paging station microphone to the end of a loudspeaker line. The external cables connected to the control inputs are monitored for short and open circuit and an internal, generated pilot tone is available for monitoring impedance on the loudspeaker lines. The system can handle up to 256 zones with 1~99 priorities, satisfying even the most complex public address and voice alarm requirements. The controller monitors the status of all the equipment in the system, reports status changes and logs error details. The log can be accessed on the front-panel display of IDA8C or on a PC through ATEIS Studio.

## MAIN CHARACTERISTICS

- Support a maximum up to 31 slave units in ATEÏS Local-Net
- Up to 256 zones provision via ATEÏS Local-Net
- Fully digital with 8 audio inputs and 8 audio outputs
- 2 dedicated and monitored PDC-ports for paging consoles
- 2 dedicated audio in and outputs for back-up amplifiers
- Enhanced loudspeaker line surveillance for each zone installation
- Simultaneous control and routing of 48 audio channels over dedicated network
- 24bit, 48k sampling digital A/D converter, 32bit DSP
- Each of the 8 zones offers 1000W (MAX.)
- 25 / 70 / 100V selectable outputs
- Up to 100m by using CAT-5 cable with NET-C1
- Optional Fiber-optic cards for links up to 20 km
- 9 supervised control inputs and 8 control outputs
- Modbus Protocol interface via RS485.
- Digital storage for up to 50 minutes in WAV format (16k 16 bit) or 200 minutes in G.722 format of pre-recorded messages
- 4 message players
- Programmable Message Scheduler Events
- DSP functions of PEQ, GEQ, Delays, Ducker, Gate, AGC, feedback, filter, inverter, local echo suppressor, mixer
- Ethernet interface for TERRACOM, 3rd party devices, configuration, control, diagnostics and logging
- Incident data record with at least 2047 entries
- Programmable of 4 user levels
- 1 Fault & 1 EVAC relays outputs
- Programmable 256 priority paging zones with priority(1~99)
- Export the incident log
- 1U standard 19" rack mounting
- EN54-16 certified

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## **CONTROLS AND INDICATORS**

Status LEDs ( Network / Bypass Monitoring / Bypass Mode / G. EVAC / System Fault / G. Fault )

**INTERCONNECTIONS** 

· 8 analogue audio mic/line inputs/outputs (Optional)

**CERTIFICATIONS AND APPROVALS** 

**REGIONAL CERTIFICATIONS** 

EN54-16 certified 2012

according to EN50130 - 4

CE - 0359

· 2 system LOCAL-network connections

2 connections for back-up amplifiers
 2 monitored paging console inputs

Voice Alarm

Zone LEDs (EVAC / Fault )

· 24VDC backup power input

· Fault/EVAC/BYPASS output

· 8 amplifier in and outputs

9 control inputs
8 control outputs

Europe

ATEÏS

Front

Power LEDs

Rear

## **PARTS INCLUDED**

Quantities	Components
1	IDA8Sxx Slave unit
1	110/220V AC to 24V DC power adapter
1	Set of mounting brackets for 19" rack
1	Set of connectors

## **TECHNICAL SPECIFICATIONS**

#### **Electrical**

24 VDC power supply	
Voltage	18 - 30 VDC

#### Performance

Line inputs	(Optional audio input card)
Connector	3-pin phoenix
Frequency response	$\pm 1~\text{dB}$ @ 20 Hz and 20 kHz
SNR	>81 dBA
THD	< 0.02% @ 1 kHz
Input sensitivity	0~66 dBu / 6dB steps
Input impedance	10 kohm

Line outputs	(Optional audio output card)
Connector	3-pin phoenix
SNR	>81 dBA
THD	< 0.02% @ 1 kHz
Signal	OdB
Output impedance	<100 ohm

Amplifier lines in	1 x 100V (per channel)
Max rated output pow	er 1000 W (cont. at 40°C)
Frequency response	-3 dB @ 50 Hz and 18kHz
Input level	16 dBu

Loudspeaker lines out	i x (per channel)
Rated output power	1000 W (cont. at 40°C)

#### Mechanical

Dimensions (With 19" r	ack mount brackets)	
(H x W x D)	1RU, 44 x 486 x 285 mm	
	(1-3/4" x 19" x 11-1/5")	
Weight	ght 4.2 kg (9.25 lbs)	
Mounting	19"-rack mount	
Color	RAL7016	
Environmental		
Operating temperature $-5^{\circ}C \sim 55^{\circ}C (23^{\circ}F \sim 131^{\circ}F)$		
Storage temperature	-40°C ~ 70°C (-40°E ~ 158°E)	

operating temperature	-5 0 ~ 55 0 (251 ~ 1511)	
Storage temperature	-40°C ~ 70°C (-40°F ~ 158°F)	
Relative humidity	15% to 90%	
Air pressure	600 to 1100 h Pa	

