

IDA8C

NETWORKABLE PAVA SYSTEM – CONTROLLER UNIT



IDA8 is a third-generation modular system that complies with current architectural demands requiring IP and/or fibreoptic networking to allow for even the most complex of system designs. IDA8 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 IDA8C Controller unit houses advanced audio digital signal processing (DSP), matrix control functions and a digital message player, with front panel access for a fully monitored fireman's microphone and emergency message trigger buttons. IDA8C also supports amplifier monitoring with hot-swap amplifiers and loudspeaker line impedance monitoring. It can support up to four PSS-AS monitored microphone consoles and up to eight monitored amplifiers plus two back-up amplifiers, paging into 8 different zones per unit with A/B line detection according to BS5939 part 8. Two card slots are provided for either 4-channel 0dB audio input or 4-channel audio cards. Optional AES/EBU cards are also available.

Each IDA8C 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, equalisers, compressors, limiters and delay-lines. Up to 4 hours of digital messaging (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 ATEiS Studio GUI. Several messages can be played simultaneously into different zones: up to 4 messages from a single IDA8C Controller or a total of 48 messages across an IDA8 system (controller with slaves). A built-in loudspeaker on the IDA8C allows selective feedback for all sources and 100V output signals.

IDA8S Slave units can extend the system configuration with an additional 8 inputs and 8 outputs and 2 back-up amplifiers. The slave units are available as single zone (IDA8S) or with A/B speaker line configurations (IDA8SAB), or for Low-impedance monitoring (IDA8SL).

The IDA8C Controller unit enables operators to see a detailed overview of the operational status of the entire PA system at the press of a button. It is able to run an impedance scan of all components connected to it, covering not only the input paging consoles but also connectors, cabling, processing blocks such as compressors and limiters, delay lines, the network and loudspeakers.

The IDA8C Controller operates either on mains power or on a 24V battery power supply for emergency back-up, with automatic switchover. Both power supplies are monitored. IDA8C is easily configured using the PC-based ATEiS 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 components 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 internally-generated pilot tone is available for monitoring impedance on the loudspeaker lines.

The system can handle 256 priorities for calls to hundreds of zones, satisfying even the most complex public address and emergency requirements. The controller monitors the status of all the equipment in the system, reports status changes and logs the last 999 fault messages in the system. The log can be accessed on the front-panel IDA8C display or on a PC through ATEiS Studio. The IDA8C system (controller and slaves) supports redundant network cabling, wired as a redundant loop.

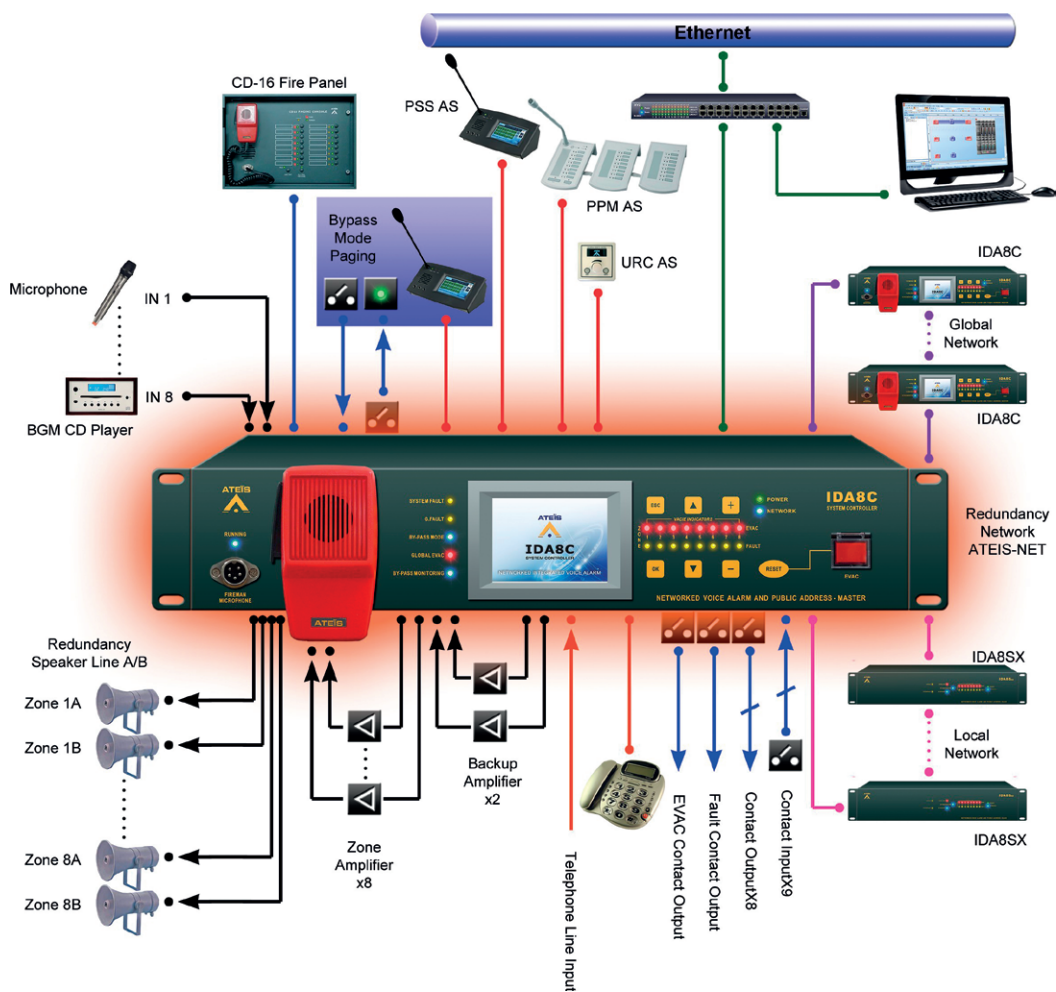
MAIN CHARACTERISTICS

- Public address and emergency sound system control unit
- Fully digital with 8 audio inputs and 8 audio outputs
- 4 dedicated and monitored PDC-ports for firemen's microphones
- 2 dedicated audio in and outputs for back-up amplifiers
- Enhanced loudspeaker line surveillance for AB-zoned installation
- Simultaneous control and routing of 48 audio channels over dedicated network
- Equipped as standard with RJ45 network cards (NET-C1) for links up to 100 m
- Optional Fibreoptic cards for links up to 20 km
- 9 supervised control inputs and 8 control outputs
- Ethernet interface for configuration, control, diagnostics and logging
- Digital storage for up to 4 hours of prerecorded messages
- 4 message players
- Stores the last 999 fault events
- EN54-16 certified

IDA8C

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INSTALLATION NOTES



IDA8C

NETWORKABLE PAVA SYSTEM – CONTROLLER UNIT

CONTROLS AND INDICATORS

Front

- 3,5" full colour touch-screen LCD display
- Zone selection buttons
- EVAC-start
- Fireman's microphone
- Status indicators

Rear

- Voltage selector

INTERCONNECTIONS

Front

- Firemen's microphone

Rear

- Mains input
- Battery backup input
- 9 control inputs
- 8 control outputs
- 4 analogue audio mic/line inputs
- 4 analogue audio line inputs
- Ethernet
- LOCAL network in/out card
- Free slot for GLOBAL-network card
- 8 amplifier in and outputs
- 2 connections for back-up amplifiers
- 4 monitored paging console inputs

CERTIFICATIONS AND APPROVALS

REGION CERTIFICATIONS

REGION	CERTIFICATIONS
Europe	CE – 0359 (Intertek)
	Immunity according to EN50103-4
	PAVA EN54-16 certified 2012

PARTS INCLUDED

Quantities	Components
1	IDA8Cxx Controller unit
1	Power cord
1	Set of mounting brackets for 19" rack
1	Set of connectors
1	Ateis Studio software GUI

TECHNICAL SPECIFICATIONS

Electrical

Mains power supply

Voltage	115 or 230 VAC ±15%, 50/60 Hz
Power consumption	48 W

Battery power supply

Voltage	18 - 26 VDC
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Performance

Frequency response	-3 dB @ 20 Hz and 20 kHz
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Line inputs (Optional audio input card)

Connector	3-pin phoenix
Frequency response	-3 dB @ 20 Hz and 20 kHz
S/N	>90 dBA
THD	< 0,1% @ 1 kHz
Input sensitivity	770 mV
Input impedance	20 kohm

Line outputs (Optional audio output card)

Connector	3-pin phoenix
S/N	>-85 dBu
THD	< 0,02% @ 1 kHz
Signal	770 mV
Output impedance	<300 ohm

Loudspeaker lines in 8 x 100 V

Rated load resistance	20 ohm (100 V)
Rated load capacitance	250 nF (100 V)
Rated output power (per channel)	500 W (cont. at 40°C)

Loudspeaker lines out 8 x (A+B)

Rated load resistance	20 ohm (100 V)
Rated load capacitance	250 nF (100 V)
Rated output power (per channel)	500 W (cont. at 40°C)

Mechanical

Dimensions (H x W x D)

With 19" rackmount brackets	88 x 483 x 305 mm
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Weight	5.36 kg (11,8lb)
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Mounting	19"-rackmount
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Colour	RAL7016
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Environmental

Operating temperature	-5 °C to +55 °C (+23 °F to +131 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	15% to 90%
Air pressure	600 to 1100 h Pa

Ordering Information

IDA8C-C1-10 Controller with NET-C1 card & 4 audio inputs & 4 audio outputs

IDA8C-C1-2I Controller with NET-C1 card & 8 audio inputs

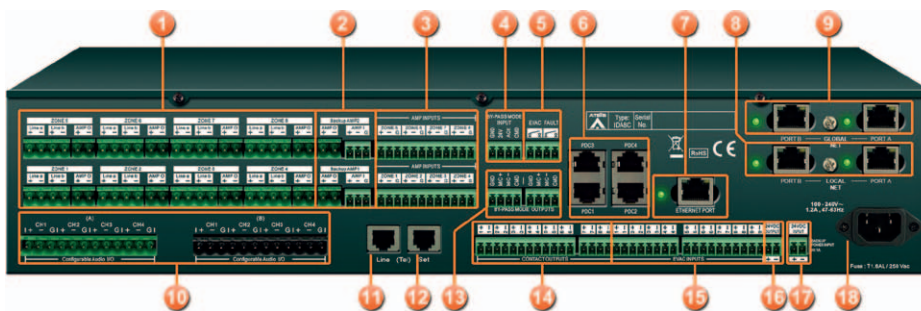


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1.	Fireman microphone active	12.	OK button
2.	Fireman microphone input	13.	Up button
3.	Fireman microphone hook	14.	Down button
4.	Monitoring loudspeaker (Audible warning)	15.	Plus button
5.	Bypass mode	16.	Minus button
6.	General fault	17.	EVAC indicators
7.	System fault	18.	FAULT indicators
8.	Global EVAC	19.	RESET button
9.	Bypass monitoring	20.	Power
10.	3.5" Touch screen	21.	Network
11.	ESC - button	22.	EVAC button



1.	Speaker zone outputs (A+B)	10.	Audio I/O
2.	Back-up amplifiers (2x)	11.	Telephone line input
3.	Amplifier OdB line outputs	12.	Telephone controller
4.	Bypass mode contact input	13.	Bypass mode outputs
5.	EVAC and GF output contact	14.	Contact outputs, 8x
6.	PDC-ports for secured paging consoles	15.	Contact inputs, 9x
7.	Ethernet	16.	24VDC slave output
8.	Local network card	17.	24VDC back-up input
9.	Global network card	18.	AC power socket