



Networkable PA/VA System Controller - Matrix Mode

The IDA8C controller houses advanced audio digital signal processing (DSP), matrix control functions, a digital message player, 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 supports 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 detection (BS 5839 part 8). 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, providing with 256 paging zones with priorities (1 ~ 99), satisfying with the most complex PA/VA requirements. The two card slots are provided for either 4 channel 0 dB 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, 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 IDA8C through the user-friendly ATEIS Studio software.

Several messages can be played simultaneously into different zones: up to 4 messages from a single IDA8C or a total of 48 messages across an IDA8 system (controller with slaves). One IDA8C can also connect to a maximum up to 31 slave units. The slave units are available as single zone (IDA8S) or with A/B speaker line configurations (IDA8SAB), or for Low-Z monitoring (IDA8SL). The IDA8C is able to run an impedance scan of all the monitored speaker lines. The IDA8C operates either on 110 VAC or 230 VAC mains power supply or on a 24V battery power supply for emergency backup, with automatic switch-over. Both power supplies are securely monitored. IDA8C is easily configured using the PC-based ATEIS Studio software.

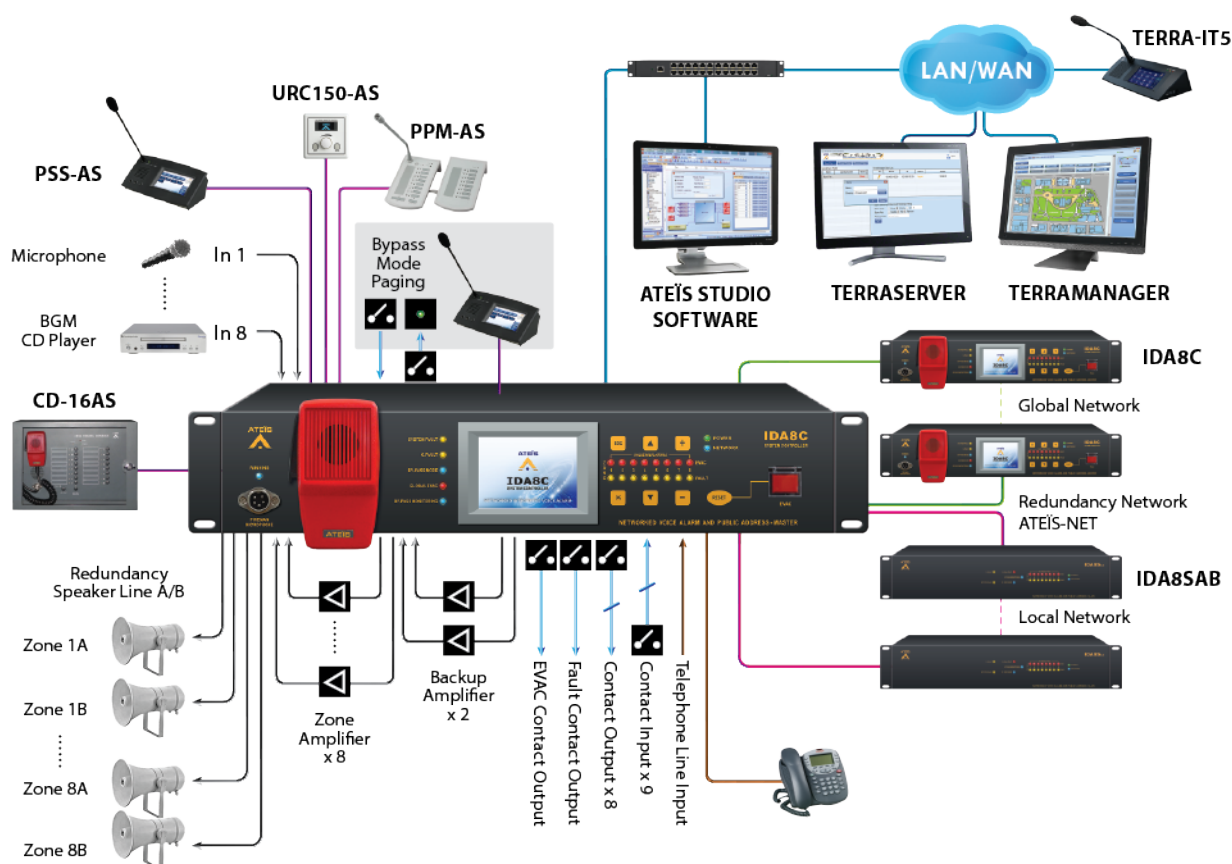
FEATURES

- Support a maximum up to 31 slave units in ATEIS Local-Net
- Up to 256 zones provision via ATEIS Local-Net
- Up to 8,192 zones provision via ATEIS Global-Net
- 2 modular I/O card-slots can be 8 IN, 8 OUT, 4 IN 4 OUT
- 4 dedicated and monitored remote ports for paging consoles
- 2 dedicated audio in and outputs for back-up amplifiers
- Loudspeaker line surveillance (short, open, bad impedance) for speaker zone wiring (A/B)
- Simultaneous control and routing of 48 audio channels over dedicated network
- 24 bit, 48k sampling digital A/D converter, 32 bit DSP
- Handle up to 1000 W wattage capacity (max.) per zone
- 25/70/100 V selectable outputs
- Up to 100 m by using STP CAT5/6 cable with NET-C1

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- Optional fiber-optic cards for links up to 20 km
- 9 supervised control inputs and 8 control outputs
- Modbus protocol interface via TCP/IP or RS485
- Digital storage for up to 100 minutes in WAV format (16k 16 bit) or 400 minutes in G.722 format of pre-recorded messages
- 4 message players
- Programmable message files, scheduler and 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 800 entries (max. 1300)
- Programmable of 4 user levels
- Telephone interface via SIP protocol or telephone line services
- 1 fault & 1 evac relays outputs
- Programmable 256 priority paging zones with priority (1 ~ 99)
- 2U standard 19" rack mounting
- Export the incident log
- EN 54-16 certified



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CHARACTERISTICS

CONTROLS AND INDICATORS

■ Front

- 3.5" full color touch screen LCD display
- EVAC/zone selection buttons
- Fireman microphone
- Status indicators (power/network/system fault/ G.fault/bypass mode global evac/bypass monitoring /fireman microphone/running zone fault/zone evac status)

INTERCONNECTIONS

■ Front

- Fireman microphone socket

■ Back

- AC power socket
- 24 VDC backup power input
- Fault/evac/bypass output
- 9 control inputs
- 8 control outputs
- 8 analogue audio mic/line inputs/outputs (optional)
- Ethernet (100 BASE-TX)
- Local/global network card (optional)
- 8 amplifier in and outputs
- 2 connections for backup amplifiers
- 4 monitored paging console inputs
- Telephone card (optional)

ELECTRICAL

- Mains power supply
 - Voltage : 115V ~ 230 VAC ±15 %, 50/60 Hz
 - Power consumption : 48 W
 - Fuse rating : 1.6 A
- Battery power supply
 - Voltage: 18 ~ 30 VDC
 - DC power input: 2 A
 - DC power output : 0.5 A

AUDIO CHARACTERISTICS

- Frequency response: ±1 dBu @ 20 Hz and 20 kHz
- Line inputs (optional audio input card)
 - Connector: 3-pin phoenix
 - Frequency response: ±1 dBu @ 20 Hz and 20 kHz
 - SNR: > 81 dBA
 - THD: < 0.02 % @ 1 kHz
 - Input sensitivity: 0 ~ 66 dBu/6 dB steps
 - Input impedance: 10k ohm
- Line outputs (optional audio output card)
 - Connector: 3-pin phoenix
 - SNR: > 81 dBA
 - THD: < 0.02 % @ 1 kHz
 - Signal: 0 dB
 - Output impedance: <100 ohm
- Amplifier capacity (per zone): 1,000W (max.)
- Speaker line monitoring
 - < 5 ohm (SHORT)
 - 5 ~ 5,000 ohm (Impedance value)
 - > 5,000 ohm (OPEN)

MECHANICAL

- Dimensions (W x H x D): 486 x 88 x 313 mm
- Weight: 5.4 kg
- Mounting: 19" 2U rack
- Colour : RAL7016

ENVIRONMENTAL

- Operating temperature: -5 °C ~ +55 °C
- Storage temperature: -40 °C ~ +70 °C
- Relative humidity: 20% to 95%
- Air pressure : 600 to 1100 hPa
- Heat dissipation: 153 BTU/hr

CERTIFICATIONS AND APPROVALS

Europe	Voice Alarm	EN54-16 1438-CPR-0871 0359-CPD-0177
		according to EN 50130-4
Europe	Railway Controller System	EN 50121-4
USA	Safety	UL 60065

PARTS INCLUDED

Quantities	Components
1	IDA8Cxx controller
1	Fireman microphone
1	Power cord (type depends on region)
1	Set of mounting brackets for 19" rack
1	Set of connectors
1	ATEIS Studio GUI software
1	LAN cable