Public Address - Voice Alarm
Audio Distribution over IP
Commercial Audio
Intelligent Acoustic Solutions
Intercommunication
Loudspeakers

Public Address & Voice Alarm

Delivering Your Message

Ver. 5
ATEIS which boosts 30-years of experience in the research and development of Public Address and Voice Evacuation Systems now introduces a new system that perfectly integrates Fire-Alarm with Voice-Alarm according to EN 54-16(VACIE&FACIE), BS 5839-Part 8 and ISO 7240-16, compliance for large installations and installations with specific purpose.

IDA8 Digital Public Address and Voice Alarm series is a 3rd generation modular system that complies with current architectural demands that required IP- and/or Fiber-optics Networking to cover for any complex design possible.

ATEIS has developed and will continue developing dedicated system for Digital Public Address and Voice-Alarm applications.
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IDA8 is a third-generation modular system that complies with current architectural demands requiring IP and/or fiber-optic 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, UL60065 and BS5839/8, with specific attributes for compliance in large installations.
Public Address - Voice Alarm
Audio Distribution over IP
Commercial Audio
Intelligent Acoustic Solutions
Intercommunication
Loudspeakers

IDA8SAB - Networkable PAVA System
Slave Unit – A/B-zoning – Matrix Mode

IDA8S - Networkable PAVA System
Slave Unit – Matrix Mode

IDA8SAB - SW - Networkable PAVA System
Slave Unit – Switch Mode

IDA8SL - Networkable PAVA System
Lo-Z Slave Unit – Matrix Mode
IDA8 is a third-generation modular system that complies with current architectural demands requiring IP and/or fiber-optic networking to allow for even the most complex of system designs. IDA8C responds to Public Address and Voice Alarm requirements as stated in EN54-16, UL60965, 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 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 ATEÏS local-net, providing with 256 paging zones with priorities (1~99), satisfying with the most complex public address and voice alarm requirements. 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, 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 ATEÏS Studio GUI. Several messages can be played simultaneously into different zones: up to 4 messages from a single IDA8C 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). A built-in loudspeaker on the IDA8C allows selective feedback for all zones and audio in & out expansion of the IDA8 systems, using a network of one controller and a maximum up to 31 Slave units. The slave units are available as single zone (IDA8S) or with A/B line detection (IDA8SA), or for Lo-Z 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 cabling, processing blocks such as compressors and limiters, delay lines, the network and loudspeakers.

The IDA8C Controller operates either on 110VAC or 230VAC mains power supply or on a 24V battery power supply for emergency back-up, with automatic switch-over. Both power supplies are securely monitored. IDA8C 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.

**MAIN CHARACTERISTICS**

- Support a maximum up to 31 slave units in ATEÏS Local-Net
- Up to 256 zones provision via ATEÏS Local-Net
- Up to 8192 zones provision via ATEÏS Global-Net
- Fully digital with 8 audio inputs and 8 audio outputs
- 4 dedicated and monitored PDC-ports for paging consoles
- 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
- 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 CAT5 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 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 Scheduler Events
- DSP functions of PEQ, GEQ, Delays, Ducker, Gate, AGC, feedback, filter, inverter, 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
- EN54-16 certified, UL listed
- To cooperate with RU devices to do redundancy, external power is requested
In accordance with EN54-16, UL60065, 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 paging zones with priority(1~99), satisfying with 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 the last 1300 fault messages in the system. The log can be accessed on the front-panel IDABC display or on a PC through ATEIS Studio.
**IDA8C**

**NETWORKABLE PAVA SYSTEM CONTROLLER – MATRIX MODE**

**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 / By-Pass Mode / Global Evac / By-pass Monitoring / Fireman microphone running / Zone Fault / Zone Evac Status)

**INTERCONNECTIONS**

Front
- Firemen microphone

Rear
- AC power socket
- 24VDC backup power input
- Fault/EVAC/BYPASS output
- 9 control inputs
- 8 control outputs
- 8 analogue audio mic/line inputs/outputs (Optional)
- Ethernet (100BASE-TX)
- Local / Global Network Card (Optional)
- 8 amplifier in and outputs
- 2 connections for backup amplifiers
- 4 monitored paging console inputs
- Telephone Card (Optional)

**PARTS INCLUDED**

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**TECHNICAL SPECIFICATIONS**

**Electrical**

- **Mains power supply**
  - Voltage: 230/115 VAC ±15%, 50/60 Hz
  - Power consumption: 48 W
  - Fuse Rating: 1.6 A

- **Battery power supply**
  - Voltage: 18 – 30 VDC
  - Amp Consumption: 1.4 A

**Performance**

- **Frequency response**
  - ±1 dB @ 20 Hz and 20 kHz

**Line inputs**

- (Optional audio input card)
  - Connector: 3-pin phoenix
  - Frequency response: ±1 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: 0dB
  - Output impedance: <100 ohm

**Amplifier Capacity (per zone)**

- Input: 1000 W (MAX.)

**Monitoring Loudspeaker**

- Input: 1< 50 Ohm (Display SHORT)
- 50–5000 Ohm (Display Impedance value)
- 1>5000 Ohm (Display OPEN)

**Mechanical**

- Dimensions (With 19” rack mount brackets)
  - (H x W x D): 2RU, 88 x 486 x 313 mm
  - (3.5” x 19” x 12-1/3”)

- Weight: 5.36 kg (11.8 lbs)

- Mounting: 19”-rack mount

- Color: RAL7016

**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
- Heat Dissipation: 153 BTU/hr

**CERTIFICATIONS AND APPROVALS**

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IDA8 is a third-generation modular system that complies with current architectural demands requiring IP and/or fiber-optic 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 CATS or fiber optic, which can be a network of one controller and a maximum up to 31 Slave units via ATEÏS 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. 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 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 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 ATEÏS Studio.
IDA8 system

IDA8S

NETWORKABLE PAVA SYSTEM – SLAVE UNIT – MATRIX MODE

CONTROLS AND INDICATORS

Front
- Status LEDs (Network / Bypass Monitoring / Bypass Mode / G. EVAC / System Fault / G. Fault)
- Zone LEDs (EVAC / Fault)
- Power LEDs

INTERCONNECTIONS

Rear
- 24VDC mains power input
- Fault/EVAC/BYPASS output
- 9 control inputs
- 8 control outputs
- 8 analogue audio mic/line inputs/outputs (Optional)
- 2 Local ATEIS Network connections
- 8 amplifier in and outputs
- 2 connections for back-up amplifiers
- 2 monitored paging console inputs

TECHNICAL SPECIFICATIONS

Electrical

- 24 VDC power supply
- Voltage: 18 – 30 VDC
- Amp Consumption: 1.4 A

Performance

- Frequency response: ±1 dB @ 20 Hz and 20 kHz
- Connector: 3-pin phoenix
- Frequency response: ±1 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 inputs (Optional audio input card)
- Connector: 3-pin phoenix
- Frequency response: ±1 dB @ 20 Hz and 20 kHz
- SNR: >81 dBA
- THD: < 0.02% @ 1 kHz
- Signal: 0dB
- Output impedance: <100 ohm

Parts Included

- Quantities
- Components
- 1 IDA8Sx Slave unit
- 1 110/220V AC to 24V DC power adapter
- 1 Set of mounting brackets for 19" rack
- 1 Set of connectors

Amplifier Capacity (per zone)
- Input: 1000 W (MAX.)

Monitoring Loudspeaker
- Input: 1< 50 Ohm (Display SHORT)
- 50–5000 Ohm (Display Impedance value)
- 1>5000 Ohm (Display OPEN)

Mechanical

- Dimensions (With 19" rack mount brackets)
  - (H x W x D): 1RU, 44 x 486 x 285 mm
  - (1-3/4" x 19" x 11-1/5")
- Weight: 4.2 kg (9.25 lbs)
- Mounting: 19" -rack mount
- Color: RAL7016

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
- Heat Dissipation: 126 BTU/hr

Regional Certifications

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

Certifications and Approvals

- CE – 0359 -0177
- Voice Alarm: EN54-16 certified 2012
- CE – 0359
- according to EN50130 – 4
IDA8 is a third-generation modular system that complies with current architectural demands requiring IP and/or fiber-optic networking to allow for even the most complex of system designs. IDA8SAB 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.

**CONNECTIVITY:**

The IDA8SAB Slave unit houses advanced audio digital signal processing (DSP), matrix control functions and a digital message player, along with amplifier monitoring with hot-swap amplifiers and loudspeaker line-impedance line monitoring. It can support up to two PSS-AS monitored microphone consoles, up to eight monitored amplifiers plus two backup amplifiers and paging into 8 different zones per unit with A/B line detection according to the 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 & audio output 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 ATEÏS local-net. Two rear card slots can be fitted with optional 4-channel analogue audio in/output cards 4 channel AES/EBU cards for digital audio in/out.

IDA8SAB Slave units provides extension of IDA8 system configuration with an additional 8 output zones and 2 back-up amplifiers. Digital messaging can be stored in the unit for live or scheduled playback. Files are uploaded in G.711, G.722, G.726, G.727 and WAV format from a computer using the ATEÏS Studio system GUI. Several messages can be played simultaneously into different zones: up to 4 from a single IDA8SAB or a total of 48 message channels across a full IDA8 system with slaves.

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-lanes.

IDA8SAB is easily configured with PC-based ATEÏS Studio global software. Once programmed, the system will run independently without a PC connected. The IDA8SAB Slave operates either on 110VAC or 230VAC mains power or on a 24V DC power supply for emergency back-up, with automatic switchover. Both of the power supplies are monitored.

**SECURITY:**

In accordance with EN54-16, UL60065, ISO 7240-16 and BS5839/8, all 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 internal, generated pilot tone is available for monitoring impedance on the loudspeaker lines. The IDA8SAB Slave supports redundant network cabling as a redundant loop. The system can handle up to 256 zones with priority(1–99), satisfying even the most complex public address and voice alarm requirements.
IDA8 system

IDA8SAB

INSTALLATION NOTES

Public Address - Voice Alarm
Audio Distribution over IP
Commercial Audio
Intelligent Acoustic Solutions
Intercommunication
Loudspeakers
IDA8SAB

NETWORKABLE PAVA SYSTEM – SLAVE UNIT – A/B-ZONING – MATRIX MODE

CONTROLS AND INDICATORS

Front
- Status LEDs (Network / Bypass Monitoring / Bypass Mode / G. EVAC / System Fault / G. Fault)
- Zone LEDs (EVAC / Fault)
- Power LEDs

Rear
- AC power socket
- 24VDC backup power input
- BYPASS Mode output
- 9 control inputs
- 8 control outputs
- 8 analogue audio mic/line inputs/outputs (Optional)
- 2 Local ATEÏS Network connections
- 8 amplifier in and outputs
- 2 connections for back-up amplifiers
- Telephone Card (Optional)
- 2 monitored paging console inputs

INTERCONNECTIONS

Parts Included

Amplifier Capacity (per zone)
- Input 1000 W (MAX.)

Monitoring Loudspeaker
- Input 1-< 50 Ohm (Display SHORT)
- 50–5000 Ohm (Display Impedance value)
- 1>5000 Ohm (Display OPEN)

Technical Specifications

Electrical
- Mains power supply
  - Voltage 230/115 VAC ±15%, 50/60 Hz
  - Power consumption 48 W
  - Fuse Rating 1.6 A
- Battery power supply
  - Voltage 18 - 30 VDC
  - Amp Consumption 1.4 A

Performance
- Frequency response ±1 dB @ 20 Hz and 20 kHz

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
- Heat Dissipation 140 BTU/hr

CERTIFICATIONS AND APPROVALS

Regional Certifications

Europe Voice Alarm
- EN54-16 certified 2012
  - CE – 0359 according to EN50130 – 4
- EN50121 – 4

Railway Controller System

USA Safety UL60065
IDA8 is a third-generation modular system that complies with current architectural demands requiring IP and/or fiber-optic networking to allow for even the most complex of system designs. IDA8SL responds to Public Address and Voice Alarm requirements as stated in EN54-16(Pending), UL60065, ISO 7240-16 and BS5839/8, with specific attributes for compliance in large installations.

**Connectivity:**

The IDA8SL Lo-Z Slave unit houses advanced audio digital signal processing (DSP), matrix control functions and a digital message player, along with amplifier monitoring with hot-swap amplifiers and Lo-Z line monitoring. It can support up to two PSS-AS monitored microphone consoles, up to four monitored amplifiers plus one backup amplifier and paging into 4 different zones per unit with line detection. 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.

IDA8SL Slave units provides extension of IDA8 system configuration with an additional 4 output zones and 1 back-up amplifier. Digital messaging can be stored in the unit for live or scheduled playback. Files are uploaded in G.711, G.722, G.726, G.727 and WAV format from a computer using the ATEÏS Studio system GUI. Several messages can be played simultaneously into different zones: up to 4 from a single IDA8SL or a total of 48 message channels across a full IDA8 system with slaves.

IDA8SL is easily configured with PC-based ATEÏS Studio global software. Once programmed, the system will run independently without a PC connected. The IDA8SL-Slave operates either on 110VAC or 230VAC mains power or on a 24V DC power supply for emergency back-up, with automatic switchover. Both of the power supplies are monitored.

**Security:**

In accordance with EN54-16(Pending), UL60065, ISO 7240-16 and BS5839/8, all 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 IDA8SL Slave supports redundant network cabling as a redundant loop. The system can handle up to 256 zones with 1–99 priorities, satisfying even the most complex public address and voice alarm requirements.
**IDA8 SL**

**NETWORKABLE PAVA SYSTEM LO-Z SLAVE UNIT – MATRIX MODE**

### CONTROLS AND INDICATORS

**Front**
- Status LEDs (Network / Bypass Monitoring / Bypass Mode / G. EVAC / System Fault / G. Fault)
- Zone LEDs (EVAC / Fault)
- Power LEDs

**Rear**
- AC power socket
- 24VDC backup power input
- BYPASS Mode output
- 9 control inputs
- 8 control outputs
- 2 Local ATEIS Network connections
- 4 low-impedance amplifier in and outputs
- 1 connection for back-up amplifiers
- 2 monitored paging console inputs

### INTERCONNECTIONS

- AC power socket
- 24VDC backup power input
- BYPASS Mode output
- 9 control inputs
- 8 control outputs
- 2 Local ATEIS Network connections
- 4 low-impedance amplifier in and outputs
- 1 connection for back-up amplifiers
- 2 monitored paging console inputs

### PARTS INCLUDED

**Quantities**
- 1 IDA8SLxx Slave unit
- 1 Power cord (type depends on region)
- 1 Set of mounting brackets for 19” rack
- 1 Set of connectors

### TECHNICAL SPECIFICATIONS

**Electrical**

- **Mains power supply**
  - Voltage: 230/115 VAC ±15%, 50/60 Hz
  - Power consumption: 48 W
  - Fuse Rating: 1.6 A

- **Battery power supply**
  - Voltage: 18 - 30 VDC
  - Amp Consumption: 1.4 A

**Performance**

- **Frequency response**
  - ±1 dB @ 20 Hz and 20 kHz

**Line inputs**

- Connector: SPEAKON (electronically balanced)
- Frequency response: ±1 dB @ 20 Hz and 20 kHz
- SNR: >81 dB
- THD: < 0.02% @ 1 kHz
- Input sensitivity: 0–66 dBu / 6dB steps
- Input impedance: 10 kohm

**Line outputs**

- Connector: XLR
- SNR: >81 dB
- THD: < 0.02% @ 1 kHz
- Signal: 0dB
- Output impedance: <100 ohm

### TECHNICAL SPECIFICATIONS

**Amplifier Capacity (per zone)**
- Input: 1500 W (MAX.)

**Monitoring Loudspeaker**
- Input: >0, <5000 Ohm
  - (Display Impedance value)
  - >5000 Ohm (Display OPEN)

**Mechanical**

- **Dimensions**: (With 19” rack mount brackets)
  - (H x W x D): 2RU, 88 x 486 x 300 mm
  - (3-1/2” x 19” x 11-4/5”)
- Weight: 4.2 kg (9.25 lbs)
- Mounting: 19”-rack mount
- Color: RAL7016

**Environmental**

- Operating temperature: -5°C – 55°C (23°F – 131°F)
- Storage temperature: -40°C – 70°C (-40°F – 158°F)
- Relative humidity: 15% to 90%
- Air pressure: 600 to 1100 h Pa
- Heat Dissipation: 140 BTU/hr

### CERTIFICATIONS AND APPROVALS

**Regional Certifications**

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<th>EN54-16 certified (Pending)</th>
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<td>according to EN50130 – 4</td>
</tr>
</tbody>
</table>

| USA   | Safety    | UL60065                     |

UL Listed: E341243
IDA8C-SW supports up to 4 audio sources including Evac/ Voice/ Music/ Backup, utilizing with a maximum capacity of 1000 W for each and the choice of audio source can be selected from one source only for the systems. Featuring 8 monitored zones for 25V/70V/100V outputs with simultaneous selection, control inputs, and contact outputs. IDA8C-SW provides the zones and audio in & out expansion of the IDA8C-SW 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 ATEÏS local-net, providing with 256 paging zones with priorities (1~99). Furthermore, IDA8C-SW is capable to expand up to 8192 zones via ATEÏS global-net, satisfying with the most complex public address and voice alarm requirements.

The IDA8C-SW requires up to 4 channel amplifier and be capable to act as a backup amplifier in case other amplifiers break down. In case of evacuation, the zones attenuators will be bypassed automatically and signal output shall be activated when certain zone is occupied with a source that has a higher priority than the music alarm or voice paging. Two card slots are provided for either 4-channel 0dB audio input or 4-channel audio cards. Optional AES/EBU cards are also available.

IDA8C-SW Controller unit is capable to run an impedance scan of all the components, covering not only the input paging consoles but the cabling, and processing blocks such as compressors and limiters, delay lines, network and loudspeakers. Digital messaging (G.711, G.722, G.726, G.727 and WAV format) can be stored for live or pre-recorded playback. It stores a reference measurement of the system as users create a given configuration. This reference will be subsequently stored in the system. Any alterations of this configuration will be reported and logged in an event log file as well. The custom setting of threshold shall be applied in it, allowing users to meet each circumstances.

Password protecting to the software allows you to protect all recorded data file which shall be consulted both on the front LCD display panel and in the ATEÏS-Studio global version software (Windows compatible) via the PC. Once programmed, the system enables to work independently (off-line) without the need of connecting to the PC. Also, any detected fault shall be signaled by a general fault on the front panel of IDA8C-SW Controller unit.

IDA8C-SW controller unit enhances the abilities to connect with the touch panel microphone consoles (PSS-AS) and programmable transfer contacts. As well as to support the system operation via PC, or 3rd party control such as Crestron or AMX and other control systems to meet users’ demands.
IDA8C-SW

NETWORKABLE PAVA SYSTEM CONTROLLER – SWITCH MODE

CONTROLS AND INDICATORS

Front
- 3.5” full color touch-screen LCD display
- EVAC / Zone selection buttons
- Fireman microphone
- Status indicators (Power / Network / Bypass / Monitoring / G. EVAC / G. Fault)

INTERCONNECTIONS

Front
- Firemen microphone

Rear
- AC power socket
- 24VDC backup power input
- Fault/EVAC/BYPASS output
- 9 control inputs
- 8 control outputs
- 8 analogue audio mic/line inputs/outputs (Optional)
- Ethernet (100BASE-TX)
- Local / Global network in/out card
- 4 amplifier inputs and outputs
- 4 monitored paging console inputs
- BNC (Optional with AES-EBU)
- Telephone Card (Optional)

CERTIFICATIONS AND APPROVALS

REGIONAL CERTIFICATIONS

Europe
- Voice Alarm EN54-16 certified(Pending)
- CE – 0359 according to EN50130 – 4

USA
- Safety UL60065

        | Quantities | Components                                      |
        |------------|-------------------------------------------------|
        | 1          | IDA8Cxx-SW Controller unit                      |
        | 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 software GUI                      |
        | 1          | LAN Cable                                      |

TECHNICAL SPECIFICATIONS

Electrical

Mains power supply
- Voltage 230/115 VAC ±15%, 50/60 Hz
- Power consumption 48 W
- Fuse Rating 1.6 A

Battery power supply
- Voltage 18 - 30 VDC
- Amp Consumption 1.4 A

Performance

Frequency response ±1 dB @ 20 Hz and 20 kHz

Line inputs
- (Optional audio input card)
  - Connector 3-pin phoenix
  - Frequency response ±1 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 0dB
  - Output impedance <100 ohm

Parts Included

Amplifier Capacity (per zone)
- Input 1000 W (MAX.)
- Monitoring Loudspeaker
  - Input 1< 50 Ohm (Display SHORT)
  - 50~5000 Ohm (Display Impedance value)
  - 1~5000 Ohm (Display OPEN)

Mechanical

Dimensions (With 19” rack mount brackets)
- (H x W x D) 2RU, 88 x 483 x 305 mm
- (3-1/2” x 19” x 12”)
- Weight 6.2 kg (13.65 lbs)
- Mounting 19”-rack mount
- Color RAL7016

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
Heat Dissipation 140 BTU/hr

Parts Included

IDA8C-SW Controller unit
Fireman microphone
Power cord (type depends on region)
Set of mounting brackets for 19” rack
Set of connectors
ATEIS Studio software GUI
LAN Cable
IDA8SAB (switch mode) supports up to 4 audio sources including Evac/ Voice/ Music/ Backup, utilizing with a maximum capacity of 1000 W for each and the choice of audio source can be selected from one source only for the systems. Featuring 8 monitored zones for 25V/70V/100V outputs with simultaneous selection, control inputs, and contact outputs. IDA8SAB (switch mode) 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 ATEÏS local-net, providing with 256 paging zones with priorities (1~99). Two rear card slots can be fitted with optional 4-channel analogue audio in/output cards 4 channel AES/EBU cards for digital audio in/out.

IDA8SAB (switch mode) requires less number of amplifiers with only 4 audio inputs / outputs (EVAC/ Voice/ Music/ Back up) from amplifier and be capable to act as a backup amplifier in case other amplifiers break down. Users shall manually route the signal and digital messages into the selected zones and adjust the audio level, switch the music (ON/OFF)...etc. In case of evacuation, the zones attenuators will be bypassed automatically and signal output shall be activated when certain zone is occupied with a source that has a higher priority than the music alarm or voice paging.

IDA8SAB (switch mode) slave unit is a user-friendly device which shall be configured via PC based on ATEÏS Studio global version software (Windows compatible) and password protecting to the software allows you to protect your data. Once programmed, the system enables to work independently(off-line) without the need of connecting to a PC. Also, any detected faults and alarm status are signaled by general fault and alarm output contacts. A local loudspeaker enables selective listening to all the sources and the system’s output signals.

All these features make IDA8SAB (switch mode) the ideal system for shopping malls, hotels, restaurants, museums and many other public places.
IDA8SAB- SW

NETWORKABLE PAVA SYSTEM – SLAVE UNIT – SWITCH MODE

CONTROLS AND INDICATORS

Front
- Status LEDs (Network / Bypass Monitoring / Bypass Mode / G. EVAC / System Fault / G. Fault)
- Zone LEDs (EVAC / Fault)
- Power LEDs

Rear
- AC power socket
- 24VDC backup power input
- BYPASS Mode output
- 9 control inputs
- 8 control outputs
- 8 analogue audio mic/line inputs/outputs (Optional)
- 2 system LOCAL-network connections
- 4 amplifier inputs and outputs
- BNC (Optional with AES-EBU)
- Telephone Card (Optional)
- 2 monitored paging console inputs

INTERCONNECTIONS

Parts Included

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IDA8SABxx-SW Controller unit</td>
</tr>
<tr>
<td>1</td>
<td>Power cord (type depends on region)</td>
</tr>
<tr>
<td>1</td>
<td>Set of mounting brackets for 19” rack</td>
</tr>
<tr>
<td>1</td>
<td>Set of connectors</td>
</tr>
</tbody>
</table>

Amplifier Capacity (per zone)

- Input: 1000 W (MAX.)

Monitoring Loudspeaker

- Input: 1< 50 Ohm (Display SHORT)
- 50–5000 Ohm (Display Impedance value)
- 1>5000 Ohm (Display OPEN)

Technical Specifications

Electrical

- Mains power supply:
  - Voltage: 230/115 VAC ±15%, 50/60 Hz
  - Power consumption: 48 W
  - Fuse Rating: 1.6 A
- Battery power supply:
  - Voltage: 18 - 30 VDC
  - Amp Consumption: 1.4 A

Performance

- Frequency response: ±1 dB @ 20 Hz and 20 kHz
- Line inputs:
  - Connector: 3-pin phoenix
  - Frequency response: ±1 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:
  - Connector: 3-pin phoenix
  - SNR: >81 dBA
  - THD: < 0.02% @ 1 kHz
  - Signal: 0dB
  - Output impedance: <100 ohm

Certifications and Approvals

Regional Certifications

<table>
<thead>
<tr>
<th>Region</th>
<th>Voice Alarm</th>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>EN54-16 certified(Pending)</td>
<td>UL60065</td>
</tr>
<tr>
<td></td>
<td>CE – 0359 according to EN50130 – 4</td>
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CERTIFICATIONS AND APPROVALS

Regional Certifications

- Voice Alarm: EN54-16 certified(Pending) CE – 0359 according to EN50130 – 4
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- Line outputs:
  - Connector: 3-pin phoenix
  - SNR: >81 dBA
  - THD: < 0.02% @ 1 kHz
  - Signal: 0dB
  - Output impedance: <100 ohm

Environmental

- Operating temperature: -5ºC – 55ºC (23°F – 131°F)
- Storage temperature: -40ºC – 70ºC (-40°F – 158°F)
- Relative humidity: 15% to 90%
- Air pressure: 600 to 1100 h Pa
- Heat Dissipation: 140 BTU/hr
IDA8C (Switch Mode) system requires and processes four 0 dB audio inputs into only a 4-channel amplifier (Evacuation, Voice, Music or Backup), each input is also fitted with volume controls and equalizers. The four channels can be switched ON/OFF in each zone separately. In case of Evacuation, the three channels can be used as a second alarm channel. There are three types of mode (Equal Mode, Unequal Mode, Backup Sharing Mode) which provide users with a multi-functional combination for preference.

**EQUAL MODE**

In this example of Equal Mode, the master unit IDA8C (Switch Mode) is linked up with slave units IDA8SAB(Switch Mode) by Local ATEÏS Local-Net and contains a secured paging facility with full power back-up. Each channel can handle up 1000 W audio power at 100 V and be supplied not only for the master unit but also the slave units in each zone simultaneously. Furthermore, there are regular orders for priority backing-up system (EVAC > Voice > Music > Backup). For instance, when the EVAC and Voice amplifiers break down, the Backup and Music amplifier will automatically switch to EVAC and Voice amplifiers in order to provide and maintain the urgent operating paging.

**UNEQUAL MODE**

In this example of Unequal Mode, the master unit IDA8C(Switch Mode) is linked up with slave units IDA8SAB(Switch Mode) by Local ATEÏS Local-Net and contains a secured paging facility with full power back-up. It divides the four channels into two groups and the two channels in each group can be used for the other backup amplifier in case of amplifier failure. With ATEÏS Studio software, providing the function of separating the two groups with different coverage from 1~99 of priority automatically.

Priority 1~20 sources shall be used by the EVAC and Backup channels; Priority 21~99 sources shall be used by the Voice and Music channels. In case you might face the possibility when the two amplifiers for Voice and Music sources are being occupied, the rest amplifiers for EVAC and Backup channels shall also be used as the Voice and Music sources simultaneously with one condition that there are other vacant amplifiers for EVAC and Backup.

**Note:** Make sure the Watt unit of each group must be in the same power capacity.
INSTALLATION EXAMPLES

BACKUP SHARING MODE

In this example of Backup Sharing Mode, the master unit IDA8C (Switch Mode) is linked up with slave units IDA8SAB (Switch Mode) by Local ATEÏS Local-Net and contains a secured paging facility with full power back-up. The three amplifiers supply for each zone with one amplifier individually and the backup amplifier shall be a backup for the three amplifiers once they break down and switch on the power supply automatically.

Figure 3: Backup Sharing Mode Configuration

SCENARIOS

By the ATEÏS local-Net which can be a network of one controller and a maximum up to 31 IDA8S/SL/SAB/SAB-SW Slave units in a local system, the system connects with ATEÏS Local-Net shall be able to link up with each other in different kinds of mode (Equal, Unequal, Backup Sharing). The following pictures below would give users a better understanding of how to combine the multiple modes together in two or more buildings.

Scenario 1: [Equal Mode + Unequal Mode]
INSTALLATION EXAMPLES

**Scenario 2: [Backup Sharing Mode + Equal Mode]**

**Scenario 3: [Unequal Mode + Backup Sharing Mode]**
INSTALLATION EXAMPLES

Scenario 4: [Multiple wiring with 8 amplifiers + Equal Mode]

Scenario 5: [IDA8C (Matrix Mode) + IDA8C / IDA8SAB (Switch Mode)]
In place of highly sensitive and secured integration such as nuclear power centrals, underground industrial systems or places where people have to thrust on a 100% availability of a PAVA system may require additional full-redundancy system. Redundancy is a very widely-spread application that needs to be further specified into a required level of redundancy. Compared to the higher levels of redundancy which requires for A/B wiring of the loudspeaker lines where loss of the A or B line or system still ensures a minimum coverage of 50% of the venue, spare amplifiers and surveillance of essential components in normal PAVA systems aren’t capable to support emergency cases. At this high level of redundancy, not only the amplifiers have redundancy by means of active spare amplifiers, but also the central equipment will provide a full back-up. And this is what we call Full-Redundancy. ATEÏS RU, the thorough switching devices, providing the high level of redundancy and acting as a Primary / Secondary switching device for IDA8C Controller and IDA8SAB Slave unit. Here are the three types of devices listed below,

RU-Main: Switching unit for digital audio processing with paging console interface.

RU-CTL: Switching unit for secured input and normal output contacts.

RU-PDC: Switching unit for auxiliary audio IN and OUT contacts with paging console & telephone line interface.

RU device is a device supplied with full-redundancy for audio processor. RU device is in charge of switching primary and secondary audio processor to active one of them. If primary audio processor is active, all signal of peripherals shall be redirected to the primary audio processor by RU device. RU device is also capable to monitor the status of audio processor. If primary audio processor breaks down, RU device will detect automatically and switch to secondary audio processor.
**IDA8 Full-Redundancy Switching Unit**

**RU-Main / CTL / PDC**

**Controls and Indicators**

- **Front**
  - Primary Active Indicator
  - Secondary Active Indicator
  - Fault Indicator
  - Power Indicator

**Interconnections**

- **RU-Main**
  - 8 speaker lines, 8 amplifiers, 2 backup amps, 2 PSS inputs, 2 record Out
  - Switching: Electrical mechanical relays
  - Switching time: 6 seconds (IDA8 watchdog period)
  - Connections: RJ 45, Screw terminals blocks
  - LED display: power, Primary IDA8 system active, Secondary IDA8 system Active
  - Control inputs: Primary IDA8 system watchdog, Secondary IDA8 system watchdog
  - Control outputs: Primary IDA8 system active, Secondary IDA8 system Active, Expansion

- **RU-CTL**
  - 8 x Output contacts, 9 x alarm inputs
  - Switching: Electrical mechanical relays
  - Switching time: 6 seconds (IDA8 watchdog period)
  - Connections: Screw terminals blocks
  - LED display: power, Primary IDA8 system active, Secondary IDA8 system Active
  - Control inputs: Primary IDA8 system watchdog, Secondary IDA8 system watchdog
  - Control outputs: Primary IDA8 system active, Secondary IDA8 system Active, Expansion

- **RU-PDC**
  - 8 x 0dB inputs or outputs, 2 PSS inputs, 2 Tel inputs
  - Switching: Electrical mechanical relays
  - Switching time: 6 seconds (IDA8 watchdog period)
  - Connections: RJ 45, Screw terminals blocks
  - LED display: power, Primary IDA8 system active, Secondary IDA8 system Active
  - Control inputs: Primary IDA8 system watchdog, Secondary IDA8 system watchdog
  - Control outputs: Primary IDA8 system active, Secondary IDA8 system Active, Expansion

**Parts Included**

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RU-xx unit</td>
</tr>
<tr>
<td>1</td>
<td>Power cord (type depends on region)</td>
</tr>
</tbody>
</table>

**Technical Specifications**

**Electrical**

<table>
<thead>
<tr>
<th>Power supply</th>
<th>Voltage</th>
<th>Power consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>RU-Main</td>
<td>24 VDC</td>
<td>600mA</td>
</tr>
<tr>
<td>RU-CTL</td>
<td></td>
<td>200mA</td>
</tr>
<tr>
<td>RU-PDC</td>
<td></td>
<td>350mA</td>
</tr>
</tbody>
</table>

**Mechanical**

<table>
<thead>
<tr>
<th>Dimensions (With 19&quot; rack mount brackets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RU-Main</td>
</tr>
<tr>
<td>2RU, 88 x 436 x 150 mm (3-1/2&quot; x 17-1/5&quot; x 5-9/10&quot;)</td>
</tr>
<tr>
<td>RU-CTL/PDC</td>
</tr>
<tr>
<td>1RU, 44 x 436 x 150 mm (1-3/4&quot; x 17-1/5&quot; x 5-9/10&quot;)</td>
</tr>
</tbody>
</table>

**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
- Heat Dissipation: RU-Main 50 BUT/hr, RU-CTL 16 BUT/hr, RU-PDC 28 BUT/hr

**Weight**

- RU-Main: 4.5 kg (10 lbs)
- RU-CTL/PDC: 2.5 kg (5.5 lbs)

**Mounting**

- RU-Main: 19" rack mount

**Color**

- RAL 7016
ATEÏS Net™ audio network 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 100 m 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.

**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 100 m 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.

**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

**Note:**

Port A = network IN
Port B = network OUT
IDA8 system

NET - CX

ATEÏS NET SECURED AUDIO NETWORK CARD

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

CERTIFICATIONS AND APPROVALS

REGIONAL CERTIFICATIONS

Europe Voice Alarm
- EN54-16 certified 2012
- CE – 0359

PARTS INCLUDED

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

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

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

Public Address - Voice Alarm
Audio Distribution over IP
Commercial Audio
Intelligent Acoustic Solutions
Intercommunication
Loudspeakers
### Analog Audio I/O Cards:

Analog audio cards are available for local inputs or outputs in blocks of 4 or in a 2 in/2 out configuration. Highly adjustable for sensitivity and output power. An outstanding design with the maximized flexibility by providing true 48V phantom power for each card.

**Input Audio Board**
- 4 Channels of analog audio inputs
- 3 pin Euroblock
- 0, 12, 24, 40, 54dB sensitivity levels
- Signal, RTO, overload indicators
- +48V phantom Power
- -60 to +20dB fiber range for level
- -50 to +20dB overload threshold
- Mute and bypass signal control
- Volume display for each channel
- RoHS compliant

**Output Audio Board**
- 4 channels of analog audio outputs
- 3 pin Euroblock
- Signal, overload indicators
- -60 to +20dB fiber range for level
- -20 to +20dB overload threshold
- Mute and bypass signal control
- Volume display for each channel
- RoHS compliant

### Digital Audio I/O Cards

The digital audio I/O cards allow you to go all the way to digitize, presenting with the maximum sound quality and transmission distance on IDA8 platform. Digital cards enhance a higher capacity of input & output configuration with up to 8 channels in and 8 channels out on a single card.

**AES/EBU Card**
- Mono Input / Output: 4 channels audio input and 4 channels output of digital audio
- Stereo Input / Output: 2 Channels audio input (2 x 2) and 2 channels output of digital audio (2 x 2), Duplex Stereo (2 CH for each channel): 4 channels audio input (1,2 CH) and 2 channels outputs of digital audio (3,4 CH)
- 3 pin Euroblock
- RTO / Overload / Signal Indicators
- -20 to + 20 dB for overload threshold
- -60 to + 20 dB fiber range of level
- Level control
- Volume display for each channel
- Mute and bypass control
- Digital transmission can be reach 100 meter
- RoHS compliant

**Telephone Card**
- Initiate outgoing calls:
  - DTMF tone dialing
  - Speed-dialing
  - Redial
  - Flash (3-way telephone conversation)
- Manual or auto answer incoming call
- (optional N times)
- Touch-tone decoding
- Caller ID reception
- Disable Hang up sound / Noise Suppression / Line Echo Cancellation / Voice Enhance signal control
- Continuous Line Status and Fault Monitoring
- Mute and level control for caller voice and ring tone
- Various way to control telephone module:
  - Control signal from logic components
  - External keypad remote controller
  - Software control panel
  - 3rd party command via RS232 or Ethernet
- Extensive customization options and parameters
- RoHS compliant

### Specialty Cards

How can a multi-project integrate in both PAVA system and conference rooms? By adding the Telephone Card which successfully achieves the teleconferencing capabilities on IDA8 platform.
# Model Number Combination

<table>
<thead>
<tr>
<th>Main</th>
<th>Optional Segment 1</th>
<th>Optional Segment 2</th>
<th>Optional Segment 3</th>
<th>Optional Segment 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDA8C-</td>
<td>Audio Card</td>
<td>+ Phone Card</td>
<td>+ Local Net Card</td>
<td>+ Global Net Card</td>
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<td>N/A</td>
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## Audio Card

<table>
<thead>
<tr>
<th>A</th>
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</tr>
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<tbody>
<tr>
<td>2A</td>
<td>Digital I/O x2</td>
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<tr>
<td>I</td>
<td>4 Ch. Mic/Line Input</td>
</tr>
<tr>
<td>O</td>
<td>4 Ch. Line Output</td>
</tr>
<tr>
<td>2I</td>
<td>8 Ch. Mic/Line Input</td>
</tr>
<tr>
<td>2O</td>
<td>8 Ch. Line Output</td>
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</table>

## Phone Card

| T         | Phone Card         |

## Local Net Card

<table>
<thead>
<tr>
<th>L1</th>
<th>RJ45(A)-(B)</th>
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<tr>
<td>L2</td>
<td>Fiber Optic Multi Mode(A)-RJ45(B)</td>
</tr>
<tr>
<td>L2S</td>
<td>Fiber Optic Single Mode(A)-RJ45(B)</td>
</tr>
<tr>
<td>L3</td>
<td>Fiber Optic Multi Mode(A)</td>
</tr>
<tr>
<td>L3S</td>
<td>Fiber Optic Single Mode(A)-(B)</td>
</tr>
<tr>
<td>L4</td>
<td>RJ45(A)-Fiber Optic Multi Mode(B)</td>
</tr>
<tr>
<td>L4S</td>
<td>RJ45(A)-Fiber Optic Single Mode(B)</td>
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## Global Net Card

<table>
<thead>
<tr>
<th>G1</th>
<th>RJ45(A)-(B)</th>
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<tbody>
<tr>
<td>G2</td>
<td>Fiber Optic Multi Mode(A)-RJ45(B)</td>
</tr>
<tr>
<td>G2S</td>
<td>Fiber Optic Single Mode(A)-RJ45(B)</td>
</tr>
<tr>
<td>G3</td>
<td>Fiber Optic Multi Mode(A)</td>
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<tr>
<td>G3S</td>
<td>Fiber Optic Single Mode(A)-(B)</td>
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<tr>
<td>G4</td>
<td>RJ45(A)-Fiber Optic Multi Mode(B)</td>
</tr>
<tr>
<td>G4S</td>
<td>RJ45(A)-Fiber Optic Single Mode(B)</td>
</tr>
</tbody>
</table>

### Example 1

**IDA8C- 20L1G3S**

- 20: 8 Ch. Mic/Line Audio Input
- L1: Local Net Card-RJ45(A)-(B)
- G3S: Global Net Card-Fiber Optic Single Mode(A)-(B)

### Example 2

**IDA8SABSW-TL4S**

- L4S: RJ45(A)-Fiber Optic Single Mode(B)

---

**IDAS REDUNDANT SWITCHING UNIT**

**RU-MAIN:** Amplifier Input and Output/PDC

**RU-CTL:** Output control/EVAC Input

**RU-PDC:** Telephone/PDC/Adjud I/Os

In cooperation with RU devices for redundancy purpose, please refer to our local sales for:
- External DC power calculation for IDARS
- Special order for IDA8C, IDA8CSW, IDA8SAB and IDA8SABSW
ATEïS Studio

ATEïS Studio is a user-friendly graphic user interface designed for intuitive system setup. The PC-based software allows hardware updating, full system configuration and generates the user interface for day-to-day system operation.

**GRAPHICAL USER INTERFACE:**

ATEïS Studio allows complete PAVA/audio systems incorporating a range of devices to be configured, monitored and controlled centrally from a single user interface. ATEïS Studio supports all IP-based products within the ATEïS product family such as IDA8, LAP-AS and ECS. The software enables a comprehensive overview of the system and its virtual connections and also offers control and configuration for power amplifiers, paging consoles and remote controllers such as PSS-AS, CD16-AS and URC-AS devices.

**DIAGNOSING:**

ATEïS Studio monitors, controls, logs and reports a range of events. The whole system configuration preset can be stored and reloaded at the press of a button, depending on application. Users can tailor design elements of the graphic user interface or control panels, as well as program automatic sequences of events and create different levels of user access for security and rights management.

**BUILDING:**

ATEïS Studio provides a complete set of tools and building blocks for real-time control, monitoring and design of an audio system or Voice Evacuation system from paging console to loudspeaker. Detailed information such as signal levels, loudspeaker impedance, pre-recorded messages, amplifier conditions and other parameters can be monitored in real-time.

A comprehensive library of tools, control and monitoring elements is provided along with the GUI, including items such as volume control faders, metering, high-level EQ, compression, limiting, auto-gain, noise sensing, mixing, shortcut buttons and display elements. Element behavior can be fully tailored to suit each application. Built-in file transfer software transfers both data and audio files from the PC to the network controller.

**ACCESS LEVELS:**

Additional security can be added to the software with password-protected layers according to EN 54-16. Multiple users can be created and assigned, each with a unique password and access to specific layers of the GUI. This creates a control surface specific which meets the need of system designers and operators at multiple levels.

**Configuration software**

- Runs on Windows
- Assignable access levels with rights management
- All system and unit parameters can be configured
- Easy navigation
- Drag & Drop features
- Real-time monitored

**Diagnostic and logging software**

- Call, fault and general event logging
- On-line logging function
- Historical logging
- Event display priority can be changed
- Password-protected

**File transfer software**

- PC-based application
- Supplied together with the network controller
- Creation of message sets
- Off-line configuration

**NOTE:**

ATEïS Studio Software Version:

Version 1.X.X.XX for ATEïS Local-Net

Version 3.X.X.XX for ATEïS Global-Net

ATEïS global-net System:

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.
ATEïS designs and manufactures the leading products in the digital public address & voice alarm systems market. A highly demanding public transportation network is installed into IDA8-series in Europe, United States, Asia, the Middle East and global market where it is dominating the market for high-tech audio communication solutions that combine redundant networks on CAT5, Fiber-optic and TCP-IP. IDA8-series of products is the ideal choice for commercial audio applications where schedule events and background music are an integrated part of the voice-alarm, low-Z sound system. Both applications guarantee for superb quality of sound and intelligibility. IDA8-series of products are complied with the EN54-16, UL60065, ISO 7240-16 and BS5839/8

**Drag & Drop:**

After the determination of the devices included in your system, you can start configuring the internal signal paths independently for each device with all the existing features that the huge component library have offered. Simply by Drag & Drop and connects to different audio components.

The all-in-one manipulating platform enhances an easy-to-use and real-time monitored tool, helping you to concentrate on creating the cutting-edge technology.

**VOIP:**

IDA8 system, supporting VoIP based on SIP protocol and Audio over IP applications by using PPM-IT5 paging remote which makes an ideal and simple solution for bridging audio and contact closures over long distance LAN and WAN network. Efficiency and reliability are the unique features we have succeeded, even dial-up users can experience the excellent sound quality.

**Matrix Mixer:**

Breakthrough feedback cancellation -Correcting feedback and alleviates the annoyance automatically. The feedback component analyzes and detects the feedback source and adaptively attenuates the responsible frequency. There are 4 types of feedback components which are corresponded to the numbers of filters (4, 8 12 or 16) that the feedback will use.

**Auto Noise Gain (A.N.G.) / DNM:**

Featuring an integrated real-time frequency analyzer and flexible per-channel, which makes a excellent performance in a variety of operating environments. Configuring and adjusting the dynamic equalization bands can be easily done by its delectated interface.

**Page Control:**

Some applications which are integrated in PAVA system require a huge number of zones for paging. It needs to be done with multiple ATEïS audio processors (Matrix mode and Switch Mode) connected together via ATEïS Net. The Network Paging component provides the capabilities of routing the input source signal to zones and each source can specify which zone wants to page by its priority value.

**Telephone Card:**

The Telephone Card component is based as a traditional telephone interface which manages the telephone call for IDA8 system. The telephone card component consists of a TC transmit component and a TC receive component, providing with dial, receive, detect the logic signal response of DTMF status.
DIVA8G2 system is a compact PAVA solution specifically designed for small to medium-scale installations. It has all the essential functionality to comply with EN-54 requirements for Voice Alarm, including full system monitoring, loudspeaker line impedance surveillance, microphone surveillance and monitored interfacing with remote devices. DIVA8G2 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.
DIVA8G2 is a compact PAVA solution specifically designed for small to medium-scale installations. It has all the essential functionality to comply with EN 54 requirements for Voice Alarm, including full system monitoring, loudspeaker line impedance surveillance, microphone surveillance and monitored interfacing with remote devices. DIVA8G2 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 DIVA8G2 Master unit provides enhanced digital audio processing (DSP), a digital message player, a fully monitored fireman’s microphone, amplifier monitoring with switchover to backups and loudspeaker line monitoring for 16 audio lines (8 lines A/B). It can process and route one PSS-G2, CD8-G2 or CD16-G2 microphone console or up to ten cascaded PSM8-V3 paging microphones, along with two 0dB audio inputs and one mic/line input into two different channels (music + voice) using configurable priorities. The DIVA8G2 system utilizes two external amplifier channels with a maximum capacity of 1000 W each.

**PRE-PROCESSING:**

All audio inputs feature contact and VOX activation and each input is fitted with volume controls and equalizers. Up to 45 minutes of digital messaging can be stored in the unit. These are stored as WAV files and uploaded directly from a PC into the DIVA8MG2. Up to two messages can be played simultaneously in different zones for phased evacuation.

**INTERFACING:**

DIVA8MG2 has nine monitored alarm inputs which can be individually programmed for specific message/input routing to all or selected channels. Each DIVA8G2 system module has eight output zones with A/B wiring and each zone can be routed manually or automatically to one of the system’s audio channels (music or voice). The number of zones can be extended up to 128 A/B zones with the addition of DIVA8SG2 Slave units (up to a maximum of 15 slave units). The music source can be selected directly from the front panel and switched into each zone separately, also a RS232 port on the rear panel allows third-party control and interfacing.
DIVA8G2 system

**COMPACT PAVA SYSTEM – MASTER UNIT – SWITCH MODE**

**REDUNDANCY:**

In case of Evacuation, the amplifier music channel can be used as a second alarm channel. Each DIVA8G2 system requires only one 2-channel amplifier (one channel for music, one for voice). The music amplifier will also act as a backup amplifier in case of voice amplifier failure. Each channel can handle up to 1000W audio power (at 100V).

Users shall manually route the Fireman microphone signal, three digital messages into selected zones, adjust the audio level and switch (ON/OFF) the music in each zones separately from the front-panel of DIVA8MG2 (Master unit). In case of evacuation, the zone attenuator are automatically bypassed. One output contact per zone can be activated each time the zone is occupied with a source that has higher priority than the music (alarm or microphone paging).

**SECURITY:**

In accordance with EN54-16, ISO 7240-16 and BS5839/8, all DIVA8G2 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 master unit monitors the status of all the equipment in the system, reports status changes and stores the last 999 fault messages in the system. This log can be accessed on the master unit display or on a PC using the DIVA8G2 control software.

DIVA8G2 system units operate either on 110VAC or 230VAC mains power supply or on a 24V battery power supply for emergency back-up, with automatic switchover. Both power supplies are monitored.

**INSTALLATION NOTES:**

INTERCONNECTIONS:

![Interconnection diagram](image-url)
DIVA8G2 system

COMPACT PAVA SYSTEM – MASTER UNIT – SWITCH MODE

CONTROLS AND INDICATORS

Front
- 2” full color TFT screen
- Zone selection / Music control / EVAC / Reset / MSG / Test buttons
- Fireman microphone
- VACIE indicators
- Zone attenuator knobs
- Status indicators (Power / G. Fault / System Fault / EVAC / Bypass Mode)

Rear
- Voltage selector

PARTS INCLUDED

Quantities Components
1 DIVA8MG2 Master unit
1 Fireman microphone
1 Power cord (type depends on region)
1 Set of connectors
1 Set of 19” rack mount brackets
1 DIVA8G2-system software
1 LAN Cable

TECHNICAL SPECIFICATIONS

Electrical
Mains power supply
Voltage 230/115 VAC ± 15%, 50/60 Hz
Power consumption 48 W
Fuse Rating 1.6 A

Battery power supply
Voltage 18 - 30 VDC
Amp Consumption 1.4 A

Performance
Frequency response -3dB @ 20 Hz and 20 kHz

Audio Line inputs
Connector 2x2 RCA (un-balanced)
Frequency response -3dB @ 20 Hz and 20 kHz
SNR > 76 dB (Line-level)
> 78 dB (Mic-level)
THD < 0.02% @ 1 kHz
Input sensitivity 770 mV (0 dBu ~ -60 dBu)
Input impedance 10 kohm

Monitor loudspeaker
Frequency response -3dB @ 200 Hz and 20 kHz
SNR > 70 dB
THD < 5% @ 1 kHz @8ohm
Signal 16 dBu

Amplifier Capacity (per channel)
Input 1000W

Mechanical
Dimensions (With 19” rack mount brackets)
(H x W x D) 2RU, 88 x 483 x 338 mm
(3-1/2” x 19” x 13-3/10”)
Weight 7.5 kg (16.5lbs)
Mounting 19”-rack mount
Color RAL7016

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
Heat Dissipation 140 BTU/hr

CERTIFICATIONS AND APPROVALS

REGIONAL CERTIFICATIONS

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

Parts and Components: DIVA8MG2 Master unit, Fireman microphone, Power cord (type depends on region), Set of connectors, Set of 19” rack mount brackets, DIVA8G2-system software, LAN Cable.
DIVA8G2 system

DIVA8SG2 Slave Unit

DIVA8G2 system is a compact PAVA solution specifically designed for small to medium-scale installations. It has all the essential functionality to comply with EN 54 requirements for Voice Alarm, including full system monitoring, loudspeaker line impedance surveillance, microphone surveillance and monitored interfacing with remote devices. DIVA8G2 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 DIVA8SG2 Slave unit is an extension unit for the DIVA8MG2 Master. It increases the number of paging zones by 8 zones for each slave unit added in the system. Up to 15 slave units can be added per DIVA8G2 system and must be used in conjunction with the DIVA8MG2 Master. A complete DIVA8G2 system provides up to 128 zones (A/B). Slave units are linked to the system master via shielded CAT-5 cable (max. length 100m).

The DIVA8SG2 Slave handles the same 1000 W power capacity as the master unit (at 100V) on each amplifier channel (music + voice). Each zone can be routed manually or automatically to either channel. For maximum flexibility connected amplifiers can distribute their power across multiple slaves or additional amplifier channels can be added to the system to assist where more output power is needed. The 100 V amplifier signal is simply linked to the slaves to create a 100 V signal bus.

INTERFACING:

DIVA8SG2 extends the number of input and output contacts available in the system. It includes nine alarm inputs triggered either by dry contact or relay (software-selectable), eight logic contact inputs, two external fault contact inputs and eight contact outputs.

REDUNDANCY:

In case of Evacuation, the amplifier music channel can be used as a second alarm channel. Each DIVA8G2 system requires only one 2-channel amplifier (one channel for music, one for voice). The music amplifier will also act as a backup amplifier in case of voice amplifier failure. Each channel can handle up to 1000 W audio power (at 100V).

Users shall manually route the Fireman microphone signal, three digital messages into selected zones, adjust the audio level and switch (ON/OFF) the music in each zones separately from the front-panel of DIVA8MG2 (Master unit). In case of evacuation, the zone attenuators are automatically bypassed. One contact output contact per zone can be activated each time once the zone is occupied with a source that has higher priority than the music (alarm or microphone paging).

SECURITY:

In accordance with EN54-16, ISO 7240-16 and BS5839/8, all DIVA8G2 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 master unit monitors the status of all the equipment for the system, reports status changes and stores the last 2047 incident in the system. This log can be accessed on the master unit display or on a PC using the DIVA8G2 control software.

DIVA8G2 system units operate either on 110VAC or 230VAC mains power supply or on a 24V battery power supply for emergency back-up, with automatic switchover. Both power supplies are monitored.

**MAIN CHARACTERISTICS**

- 2 channel audio distribution for Paging and BGM combined back-up amplifier function
- Ethernet interface for configuration, control, diagnostics and logging via DIVA8MG2
- 9 monitored logic control inputs, 8 non-monitored logic control inputs
- 1000 Watts maximum load / 100V line outputs per channel amplifier
- Enhanced loudspeaker line surveillance for A/B-zoned installations
- 1 Fault relays & 1 EVAC relays outputs
- 1U standard 19" rack mounting
- 8 Logic relay contacts
- EN54-16 certified
Install Notes:

The DIVA8MG2 Master unit and DIVA8SG2 Slave unit are designed for entry-level solutions. It provides a cost-effective system when there’s only a paging requirement or paging with BGM. The DIVA8G2 System concept utilizes switched audio distribution from a single amplifier source to up to 128 loudspeaker groups. DIVA8MG2 Master unit and DIVA8SG2 Slave unit have 4 different system solutions.

1. Block-diagram (the upper one)

Require only 2 amplifiers DIVA8MG2 Master unit and DIVA8SG2 Slave unit in SINGLE CHANNEL mode shows how DIVA8MG2 Master unit and DIVA8SG2 Slave unit are connected to the amplifiers and to the loudspeaker lines using multiple slaves.

LEFT: SINGLE-audio for Paging/Alert and Backup for small loads. Each channel can handle up 1000 W audio power at 100 V and be supplied not only for the master unit but also the slave units in each zone. Note: The backup amplifier must have the same power capacity as the Paging/Alert amplifier.

RIGHT: SINGLE-audio for Paging/Alert and Backup for higher loads. Requires and processes 0 dB audio outputs and handle up 3000 W audio power at 100 V from the DIVA8M Master unit to the DIVA8S slave units, feeding into the additional amplifiers. The system needs 1 Back-up amplifier to run the multiple DIVA master and slave units. Note: The Backup amplifier must have the same power capacity as the Paging/Alert amplifier in the system.

2. Block-diagram (the lower one)

DIVA8MG2 Master unit and DIVA8SG2 Slave unit in DUAL CHANNEL mode shows how DIVA8MG2 Master unit and DIVA8SG2 Slave unit are connected to the amplifiers and to the loudspeaker.

LEFT: DUAL-audio for Paging/Alert/BGM and Backup for small loads. Each channel can handle up 1000 W audio power at 100 V and be supplied not only for the master unit but also the slave units in each zone. Note: The BGM/Backup amplifier must have the same power capacity as the Paging/Alert amplifier in case of amplifier failure.

RIGHT: DUAL-audio for Paging/Alert/BGM and Backup for higher loads. Requires and processes 0 dB audio outputs and handle up 3000 W audio power at 100 V from the DIVA8M Master unit to the DIVA8S slave units, feeding into the additional amplifiers. In this configuration, amplifiers provide paging and music in individual zones simultaneously. Note: The BGM/Backup amplifier must have the same power capacity as the Paging/Alert amplifier in the system.
**CONTROLS AND INDICATORS**

- Front
  - Zone selection buttons
  - Zone status / Power indicators
  - VACIE indicators (EVAC / Fault / Alert / Page / Selected)

- Rear
  - AC power socket
  - 24VDC backup power input
  - 9 EVAC inputs
  - 8 control inputs
  - 2 state input (open contact & close contact)
  - Master to Slave link
  - 8 zone 100 Volt outputs (A+B)
  - Terminator switch

**INTERCONNECTIONS**

**TECHNICAL SPECIFICATIONS**

**Electrical**
- Mains power supply
  - Voltage: 230/115 VAC ±15%, 50/60 Hz
  - Power consumption: 35 W
  - Fuse Rating: 1.6 A
- Battery power supply
  - Voltage: 18 - 30 VDC
  - Amp Consumption: 1.4 A

- Frequency response: -3 dB @ 20 Hz and 20 kHz

**Amplifier Capacity (per channel)**
- Input: 1000W

**Mechanical**
- Dimensions (With 19” rack mount brackets)
  - (H x W x D): 1RU, 44 x 483 x 277 mm
  - (1-3/4” x 19” x 10-9/10”)
- Weight: 3.9 kg (8.6 lbs)
- Mounting: 19”-rack mount
- Color: RAL7016

**Environmental**
- Operating temperature: -5°C ~ 55°C (23°F ~ 131°F)
- Storage temperature: -40°C ~ 70°C (-40°F ~ 158°F)
- Relative humidity: 15% to 90%
- Air pressure: 600 to 1100 h Pa
- Heat Dissipation: 120 BUT/hr

**CERTIFICATIONS AND APPROVALS**

<table>
<thead>
<tr>
<th>Region</th>
<th>Voice Alarm</th>
</tr>
</thead>
</table>
| Europe | EN54-16 certified 2012  
  CE – 0359  
  according to EN50130 – 4 |
DPAfour (Digital Power Amplifier), SPA (Security Power Amplifier) and BPA (Bridging Power Amplifier) are designed for public address or voice alarm system application. They were specifically developed to meet the requirements of EN54-16 and can therefore also be used as part of fire detection and fire alarm systems.
DIGITAL POWER AMPLIFIERS

MAIN CHARACTERISTICS

- 4 audio outputs (100 V / 70 V / 50 V / 4 Ohm selectable)
- Fault reporting outputs
- Four audio input gain control
- Advanced audio processing for each amplifier channel using DIVA8G2 or IDA8 systems
- Supervision of the amplifiers through DIVA8G2 or IDA8 systems
- Back up amplifier switching through DIVA8G2 or IDA8 systems
- Loudspeaker line monitoring with DIVA8G2 or IDA8
- Output bridging for higher power

The DPAfour is a 2RU 19" rack mountable, 4-channel class-D power amplifier, transformer isolated for 100 V, 70 V, 50 V and 4 Ohm distributed loudspeaker systems. There are two models in the DPAfour range:

- DPAfour 125 rated at 4 x 125 W
- DPAfour 250 rated at 4 x 250 W

And one model in 8-channel range:

- DPA8060 rated at 8 x 60 W

Each channel can deliver up to 125/250W as a separate channel or can be bridged to deliver higher power. The amplifier has a dual-voltage mains supply 115/230V AC (selectable internally) and a 24 VDC battery back-up connection.

In combination with DIVA8G2 and IDA8 the DPAfour amplifiers have the following features:

- Loudspeaker line monitoring for Shortcut Open line Ground leakage.
- Single spur A/B loudspeaker lines individually monitored By adding a SONAES to the system a fully EN54-16 certified Voice Alarm system will be created, with extensive PA capabilities.
CONTROLS AND INDICATORS
- LED VU metering
- Status indicators for: Signal, Clip, Mains, Battery, Channel fault and General fault

INTERCONNECTIONS
Rear
- Rotary volume control
- Mains switch
- AC power socket
- 24VDC backup power input
- Four line inputs
- 100 V, 70 V, 50 V or 4 ohm outputs (for each amplifier channel)

CERTIFICATIONS AND APPROVALS
REGIONAL CERTIFICATIONS
Europe Voice Alarm EN54-16 certified 2012 CE – 0359 according to EN50130 – 4

PARTS INCLUDED
<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DPA xxxx Digital Power Amplifier</td>
</tr>
<tr>
<td>1</td>
<td>Power cord</td>
</tr>
<tr>
<td>1</td>
<td>Set of connectors</td>
</tr>
</tbody>
</table>

TECHNICAL SPECIFICATIONS

Electrical
Mains power supply
- Voltage 230/115 VAC ±15%, 50/60 Hz
- Power consumption** standby - idle* - Pmax (per CH.)
  DPA8060 0.2 A - 0.4 A - 2.6 A
  DPA4125 0.03 A - 1.45 A - 5.6 A
  DPA4250 0.03 A - 1.65 A - 11 A
*(Total Mains-power consumption @ 230 VAC)
** (Alarm cycle + 10 V pilot-tone @ 24 VDC)

Battery power supply
- Voltage 19-30 VDC
- Power consumption** standby - idle* - Imax (per CH.)
  DPA8060 0.2 A - 0.4 A - 2.6 A
  DPA4125 0.03 A - 1.45 A - 5.6 A
  DPA4250 0.03 A - 1.65 A - 11 A
*(Total Mains-power consumption @ 230 VAC)
** (Alarm cycle + 10 V pilot-tone @ 24 VDC)

Performance
Line inputs 4 x (One per channel) 8 x for DPA8060
Connector 3-pin phoenix
Frequency response +/-3 dB @ 50 Hz and 20 kHz
SNR 90 dB
THD < 0.1% @ 1 kHz
Input sensitivity 770 mV
Input impedance 22k Ohm

Loudspeakers outputs DPA8060
- Rated load resistance 167 Ohm (100 V); 82 Ohm (70 V)
- Rated load capacitance 30 nF (100 V); 60 nF (70 V)
- Rated output power 60 W (1 min. at 40°C) (per CH)

Loudspeakers outputs DPA4125
- Rated load resistance 80 Ohm (100 V)
- Rated load capacitance 62.5 nF (100 V)
- Rated output power 125 W (cont. at 40°C) (per channel)

Loudspeakers outputs DPA4250
- Rated load resistance 40 ohm (100 V)
- Rated load capacitance 120 nF (100 V)
- Rated output power 250 W (cont. at 40°C) (per channel)

Two channels bridged 500 W (cont. at 40°C)

Frequency response 40 Hz to 20 kHz (-3 dB)
SNR > 90 dB (no pilot tone)
Crosstalk < 70 dB at nominal load for 1 kHz
Distortion < 0.1% (@ 1 kHz)

Dimensions (19" with the fixing holes included)
(H x W x D) 2RU, 88.5 x 483 x 370 mm (3-1/2" x 19" x 14-3/5")

Weight
- DPA8060 12.7 kg (27.9 lbs)
- DPA4125 14 kg (31 lbs)
- DPA4250 18 kg (40 lbs)

Mounting 19"-rack mount
Color RAL7016

Environmental
Operating temperature -5°C – 55°C (23°F – 131°F)
Storage temperature -40°C – 70°C (-40°F – 158°F)
Relative humidity 15% to 90%
Air pressure 600 to 1100 h Pa
Heat Dissipation
- DPA8060 685 BTU/hr
- DPA4125 750 BTU/hr
- DPA4250 1500 BTU/hr
SECURITY POWER AMPLIFIERS

Main Characteristics:
- 2 audio outputs (selectable 100 / 70 / 8 Ohm outputs)
- Fault reporting outputs
- Two audio inputs with gain-set
- Supervision of the amplifiers using DIVA8G2 or IDA8 controllers
- Advanced audio processing for each amplifier channel using DIVA8G2 or IDA8 systems
- Amplifier supervision and spare amplifier switching through DIVA8G2 or IDA8 systems
- Loudspeaker line and loudspeaker supervision through DIVA8G2 or IDA8 systems

There are two types of power amplifier units in the SPA-PAVA product range. The overall power rating is 2x120 or 2x240 watts. The power amplifiers can be set to 100 V, 70 V and 8 Ohm output tapings. They have short-to-ground, short-circuit detection and line-impedance surveillance up to 5% deviation using the DIVA8G2 and IDA8 range of products for loudspeaker-line surveillance.

They support both single-spure and redundant loop cabling (A/B). The amplifiers have a changeover facility for spare power amplifier switching. Both features are facilitated by the DIVA8G2 and IDA8 controllers and slaves. The amplifiers have a 24 VDC back-up supply input.

Functions:
The power amplifiers receive line-level input signals from the DIVA8G2 and IDA8 controllers and slaves. The display panel will show the VU-meter is reading data when the EN54-16 default switch is inhibited.
Amplifiers

SPA

SECURITY POWER AMPLIFIERS

CONTROLS AND INDICATORS
- LED VU metering
- Status indicators for: Overload, Over temperature, Battery and Mains

INTERCONNECTIONS
- Rear
  - Rotary volume control
  - Mains switch
  - AC power socket
  - 24VDC backup power input
  - Four line inputs
  - 100 V, 70 V or 8 ohm outputs (for each amplifier channel)

CERTIFICATIONS AND APPROVALS

TECHNICAL SPECIFICATIONS

Electrical
- Mains power supply
  - Voltage: 220 VAC ±10%, 50 Hz
  - Power consumption:
    - SPA2120: 12 W – 290 W
    - SPA2240: 12 W – 550 W
  - **(Total Mains-power consumption)
    *Idle: Measured with 10 Volt surveillance tone on the output.

- Battery power supply
  - Voltage: 19-30 VDC
  - Power consumption:
    - SPA2120: 0.4 A – 8 A
    - SPA2240: 0.4 A – 15 A
  - **(Per ch. @ 24 VDC)
    *(Alarm cycle + 10 V pilot-tone @ 48 VDC)

Performance
- Line inputs: 2 x (One per channel)
- Connector: 3-pin XLR and 3-pin phoenix (electronically balanced)
- Frequency response: +/−3 dB @ 40 Hz and 20 kHz
- SNR: > 86 dB @ 1 kHz at full power
- THD: <=1% @ 1 kHz
- Input range: -6 dBV to 6 dBV / 770mV
- Input impedance: 22k Ohm

Loudspeakers outputs
- SPA2120
  - Rated load resistance: 40 Ohm (100 V); 20 Ohm (70 V)
  - Rated load capacitance: 125 nF (100 V); 250 nF (70 V)
  - Rated output power: 240 W (cont. at 40°C) (per channel)

- SPA2240
  - Rated load resistance: 83 Ohm (100 V); 41 Ohm (70 V)
  - Rated load capacitance: 60 nF (100 V); 125 nF (70 V)
  - Rated output power: 120 W (cont. at 40°C) (per channel)

- Frequency response: 20 Hz to 20 kHz @ -3 dB
- SNR: > 90 dB (no pilot tone)
- Crosstalk: < 80 dB at nominal load for 1 kHz
- Distortion: < 1% (@ 1 kHz) @ -10dB of rated output

Mechanical
- Dimensions (For 19" rack use with brackets) (H x W x D)
  - SPA2120: 2RU, 88 x 425 x 305 mm (3-1/2" x 16-3/4" x 12")
  - SPA2240: 2RU, 88 x 425 x 402 mm (3-1/2" x 16-3/4" x 15-4/5")
- Weight
  - SPA2120: 12.3 kg (27.1 lbs)
  - SPA2240: 18.5 kg (40.8 lbs)
- Mounting
  - 19"-rack mount
- Color
  - RAL7016

Environmental
- Operating temperature: -5°C – 55°C (23°F – 131°F)
- Storage temperature: -40°C – 70°C (-40°F – 158°F)
- Relative humidity: 15% to 90%
- Air pressure: 600 to 1100 h Pa
- Heat Dissipation
  - SPA2120: 1160 BTU/hr
  - SPA2240: 2110 BTU/hr

CERTIFICATIONS AND APPROVALS

REGIONAL CERTIFICATIONS

<table>
<thead>
<tr>
<th>Europe</th>
<th>Voice Alarm</th>
<th>EN54-16 certified 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CE – 0359 according to EN50130 – 4</td>
</tr>
</tbody>
</table>

PARTS INCLUDED

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SPA 2xxx Security Power Amplifier</td>
</tr>
<tr>
<td>1</td>
<td>Power cord</td>
</tr>
<tr>
<td>1</td>
<td>Set of mounting brackets for 19&quot; rack</td>
</tr>
<tr>
<td>1</td>
<td>Set of connectors</td>
</tr>
<tr>
<td>1</td>
<td>Set of feet</td>
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</tbody>
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CERTIFICATIONS AND APPROVALS

REGIONAL CERTIFICATIONS

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

PARTS INCLUDED

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
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<tbody>
<tr>
<td>1</td>
<td>SPA 2xxx Security Power Amplifier</td>
</tr>
<tr>
<td>1</td>
<td>Power cord</td>
</tr>
<tr>
<td>1</td>
<td>Set of mounting brackets for 19&quot; rack</td>
</tr>
<tr>
<td>1</td>
<td>Set of connectors</td>
</tr>
<tr>
<td>1</td>
<td>Set of feet</td>
</tr>
</tbody>
</table>
The BPA amplifier has a 230 VAC mains supply input and a 48 VDC battery back-up input which allows it to be used in combination with a battery backup system for maximum availability and reliability in an emergency evacuation system. BPA amplifiers have short-to-ground, short-circuit detection and line-impedance surveillance up to 5% deviation using the DIVA8G2 or IDA8 systems for loudspeaker-line surveillance. They support both single-spure and redundant loop cabling (A/B) and have a switchover facility that automatically reroutes power to a backup amplifier (if present).

BPA amplifiers have a rear-panel selector switch for amplifier monitoring according to EN 54-16.

**MAIN CHARACTERISTICS**

- 2 audio outputs for BPA2120, 2240 and 2480 (100 V / 50 V / 8 ohm selectable outputs)
- Fault reporting outputs
- Two audio inputs with gain-set
- Supervision of amplifiers through DIVA8G2 or IDA8 systems
- Advanced audio processing for each amplifier channel through DIVA8G2 or IDA8 systems
- Amplifier supervision and spare amplifier switching through DIVA8G2 and IDA8 systems
- Loudspeaker line and loudspeaker supervision through DIVA8G2 and IDA8 systems

The BPA is a 2RU 19" rack-mountable, 2-channel amplifier, transformer isolated for 100 V, 50 V and 8 Ohm distributed loudspeaker systems. There are three models in the coverage of BPA:

- **BPA2120**: 2 x 120 W
- **BPA2240**: 2 x 240 W
- **BPA2480**: 2 x 480 W
**Amplifiers**

**BPA**

**BRIDGING POWER AMPLIFIERS**

**CONTROLS AND INDICATORS**
- LED VU metering
- Status indicators for: Overload, Over temperature, Battery and Mains

**INTERCONNECTIONS**
- Rear
  - Rotary volume control
  - Mains switch at the rear of the device
  - AC power socket
  - 48VDC backup power input
- Two line inputs
- 100 V, 50 V or 8 ohm outputs
  (for each amplifier channel)

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Electrical</th>
<th>Mains power supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>230 VAC ±10%, 50/60 Hz</td>
</tr>
<tr>
<td>Power consumption**</td>
<td>standby - idle * - Pmax (per CH.)</td>
</tr>
<tr>
<td>BPA2120</td>
<td>5 W – 11 W – 295 W</td>
</tr>
<tr>
<td>BPA2240</td>
<td>5 W – 11 W – 550 W</td>
</tr>
<tr>
<td>BPA2480</td>
<td>5 W – 13 W – 1000 W</td>
</tr>
</tbody>
</table>

**(**Total Mains-power consumption)**

*Idle: Measured with 10 Volt surveillance tone on the output.

<table>
<thead>
<tr>
<th>Fuse Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPA2120</td>
</tr>
<tr>
<td>BPA2240</td>
</tr>
<tr>
<td>BPA2480</td>
</tr>
</tbody>
</table>

**Battery power supply**

<table>
<thead>
<tr>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPA ALL TYPES</td>
</tr>
<tr>
<td>Power consumption**</td>
</tr>
<tr>
<td>BPA2120</td>
</tr>
<tr>
<td>BPA2240</td>
</tr>
<tr>
<td>BPA2480</td>
</tr>
</tbody>
</table>

**(**Per ch. @ 48 VDC )

*Alarm cycle + 10 Volt pilot-tones @ 48 VDC*

**Performance**

| Line inputs | 2 x (One per channel) |
| Connector   | 3-pin XLR and 3-pin phoenix (electronically balanced) |
| Frequency response | +/-3 dB @ 50 Hz and 18 kHz |
| SNR         | > 90 dB @ 1K Hz at full power |
| THD         | <=3% @ 1 kHz |
| Input range | -6 dBV to 6 dBV / 770mV |
| Input impedance | 22k Ohm |

<table>
<thead>
<tr>
<th>Loudspeakers outputs</th>
<th>BPA2120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated load resistance</td>
<td>83 Ohm (100 V); 20 Ohm (50 V)</td>
</tr>
<tr>
<td>Rated load capacitance</td>
<td>60 nF (100 V); 250 nF (50 V)</td>
</tr>
<tr>
<td>Rated output power</td>
<td>120 W (1 min. at 40°C) (per CH)</td>
</tr>
</tbody>
</table>

**Technical Specifications**

<table>
<thead>
<tr>
<th>Loudspeakers outputs</th>
<th>BPA2240</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated load resistance</td>
<td>40 ohm (100 V); 10 ohm (50 V)</td>
</tr>
<tr>
<td>Rated load capacitance</td>
<td>125 nF (100 V); 500 nF (50 V)</td>
</tr>
<tr>
<td>Rated output power</td>
<td>240 W (1 min. at 40°C) (per CH)</td>
</tr>
</tbody>
</table>

**Regional Certifications**

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

**Parts Included**

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BPA 2xxx Bridging Power Amplifier</td>
</tr>
<tr>
<td>1</td>
<td>Power cord</td>
</tr>
<tr>
<td>1</td>
<td>Set of mounting brackets for 19” rack</td>
</tr>
<tr>
<td>1</td>
<td>Set of connectors</td>
</tr>
<tr>
<td>1</td>
<td>Set of feet</td>
</tr>
</tbody>
</table>

**Dimensions (For 19" rack use with brackets)**

<table>
<thead>
<tr>
<th>(H x W x D)</th>
<th>BPA2120 / BPA2240</th>
<th>BPA2480</th>
</tr>
</thead>
<tbody>
<tr>
<td>2RU</td>
<td>88 x 430 x 375 mm</td>
<td>92 x 430 x 430 mm</td>
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</table>

**Weight**

<table>
<thead>
<tr>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPA2120</td>
</tr>
<tr>
<td>BPA2240</td>
</tr>
<tr>
<td>BPA2480</td>
</tr>
</tbody>
</table>

**Mounting**

<table>
<thead>
<tr>
<th>Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>19”-rack mount</td>
</tr>
</tbody>
</table>

**Color**

<table>
<thead>
<tr>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAL7016</td>
</tr>
</tbody>
</table>

**Environmental**

- Operating temperature: -5°C – 55°C (23°F – 131°F)
- Storage temperature: -40°C – 70°C (-40°F – 158°F)
- Relative humidity: 15% to 90%
- Air pressure: 600 to 1100 h Pa
- Heat Dissipation: 2110 BTU/hr
- 3550 BTU/hr
The SONEAS series of battery chargers (24 VDC) are designed for Voice Alarm System. The battery chargers are microprocessor based devices that have been designed to charge lead acid batteries (back-up batteries connected to the Voice Alarm System) and, simultaneously, to provide power to auxiliary devices such as the DIVA8G2 and IDA8 system controllers.

The SONEAS battery chargers, 6/40 and 12/150, are EN54-4 certified. The maximum charging current is 6 or 12 A. The battery charger is two rack units high, and has to be installed in a 19” rack. Maximum battery capacity 114 or 225 AH. The SONEAS comes without batteries.

OVERVIEW:

To meet the secured power back-up system need, determining the exact conditions and the amount of battery back-up for a system is much complex than other applications. Public Address / Voice Alarm system does not draw a constant current. The standard defines a standby time and an evacuation time. In this case, it is crucial to pick a battery back-up that shall supply the minimum amount of power for a set amount of time. With SONEAS battery chargers, it provides you with a battery calculator program which determines the exact capacity.

REGULAR PROCEDURE AS FOLLOWS:

1. Determine the standby / evacuation current and the amount of battery back-up of the system.
2. Detect and enhance the standby / evacuation current simultaneously for 24 hours.
3. 24 Hours discharge capacity of the battery.

**MAIN CHARACTERISTICS**

**Soneas 6/40**
- 2RU-rackmount charger
- 3 Auxiliary outputs, max. 5 A per output
- 2 Main outputs, max. 20 A per output
- Battery capacity: 24 AH to 114 AH

**Soneas 12/150**
- 2RU-rackmount charger
- 3 Auxiliary outputs, max. 5 A per output
- 6 Main outputs, max. 40 A per output
- Battery capacity: 65 AH to 225 AH
Battery Charger

SONAES
CHARGER AND MONITORING UNIT - EN 54-4

REGIONAL CERTIFICATIONS

<table>
<thead>
<tr>
<th>Europe</th>
<th>Voice Alarm</th>
<th>EN54-4</th>
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<tbody>
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<td></td>
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<td>0333 – CPD – 075381</td>
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<tr>
<td></td>
<td></td>
<td>0333 – CPD – 075382</td>
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PARTS INCLUDED

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<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>SONEAS 6/40A or SONEAS 12/150A</td>
</tr>
<tr>
<td>1</td>
<td>Set of connectors</td>
</tr>
</tbody>
</table>

TECHNICAL SPECIFICATIONS

Electrical

Mains power supply
Voltage 230 VAC ±15%, 50/60 Hz
Power consumption 380 W at Full load

Battery power supply
Voltage 24 VDC
Maximum charging current
SONEAS 6/40 6 A
SONEAS 12/150 12 A

Outputs

Main for amplifiers
SONEAS 6/40 max. 40 A for 5 outputs
SONEAS 12/150 max. 150 A for 9 outputs

Auxiliary for controllers 3 x
Maximum current 5 A

Batteries 2x12 V, 24 to 225AH
Brands
Yuasa NPL Series
Power-Sonic GB Series
ABT TM Series
EnerSys VE Series
Effekta BTL Series
Long GB Series

Mechanical
Dimensions (With 19" rack mount brackets)
(H x W x D) 1RU, 44 x 483 x 310 mm
(1-3/4" x 19' x 12")

Weight
SONEAS 6/40 4.9 kg (10.8 lbs)
SONEAS 12/150 6 kg (13 lbs)

Mounting 19"-rack mount
Color RAL7016

Environmental
Operating temperature -5ºC ~ 45ºC (23ºF ~ 113ºF)
Storage temperature -20ºC ~ 85ºC (-4ºF ~ 185ºF)
Relative humidity 20% to 95% (Non-Condensing)
Air pressure 600 to 1100 h Pa
Heat Dissipation 1300BTU/hr
Consoles and Accessories

ATEIS
Programmable Remote Controller with Display

Public Address - Voice Alarm
Audio Distribution over IP
Commercial Audio
Intelligent Acoustic Solutions
Intercommunication
Loudspeakers

URC

URGP
Alarm Input Interface for IDA8-System and DIVA-System

CD-touch
Wall-mounted Monitored Touch-screen Paging Console

CD 8 / CD16
Wall-mounted Monitored Paging Console
**PSS AS / PSS G2 / PSS G2E / PPM-IT5**

**PSS MAIN CHARACTERISTICS**
- Secured CAT-5 link to controllers and slaves
- Supervision of microphone capsule
- Monitoring loudspeaker
- 5" full color touch-screen, 800 x 480 pixels
- 14-pages x 12 keys
- Power, status and fault indicator
- Comprehensive system status information from touch-screen
- EN54-16 certified

**PPM-IT5 MAIN CHARACTERISTICS**
- 5" TFT full color paging console
- High quality gooseneck microphone and built-in loudspeaker
- Ethernet interface including PoE (Power Over Ethernet)
- Automatic gain control on microphone input
- Echo cancellation / Noise Reduction
- Up to 300 pages x 12 keys
- G.711 / G.722 / G.726 / G.727 audio encoding /decoding
- Audio Stream using SHOUTcast / ICEcast (AAC 48K/44.1K) protocols
- Half or full duplex conversation
- Memory space for prerecorded messages and chime
- 3 key-buttons: User-definable via ATEIS Studio GUI
- RJ 9 for telephone headset and 2 mini-jack plugs for headset (optional)

The PSS paging console comes with a 5" TFT touch screen interface which allows call-paging, message broadcasting and DSP matrix parameter control over a secure (monitored) bus. The backlit full-color touch screen is designed for simple, user-friendly operation and offers a total of 168 software keys across 14 pages for zone or group of zones selections. Each key contains a color-changing field indicating that the zone is occupied by a different process. Alongside the touch screen, three hardware keys are also provided for free assignment within the software.

Several levels of operation with password protection make the PSS a versatile device that fits as well in a commercial shopping center as in an industrial high-security environment. All paging parameters for site operation can be pre-programmed; zones can be assigned, named, grouped to different buttons, message triggered and level, pre-call chime set and adjusted. The message and the chime can also be stored in the PSS console. In addition, fader control, button control and event control can also be pre-configured.

The PSS AS and the PSS G2 are powered by 24V DC supply.

**Note:** There are two versions of the PSS paging console with identical hardware and functionality but different firmware for compatibility with different systems.

**PSS AS:** Used with IDA8 system and ECS system controllers and slaves

**PSS G2:** Used with DIVA8G2 system controllers

**PSS G2E:** Used with DIVA8G2 system controllers and can be powered by Ethernet.

The ATEIS range of security systems complies with current architectural demands requiring IP and/or fiber-optic networking to cater for any possible PAVA design, however complex. ATEIS 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.

**PPM-IT5:** The 3 hardware keys can be freely assigned by software. The PPM-IT5 Media console is a versatile device that enhances paging over IP-networking.

All paging parameters needed for site operating can be programmed: zones assigned to different buttons, name of zones, group of zones, messages triggering or event control. A total of 3600 keys over 300 pages allow zones or groups of selection. All the settings shall be done via web pages with your web browser.
# Consoles & Accessories

## PSS AS / PSS G2 / PSS G2E / PPM-IT5

### Full Color Touch-Screen Secure Paging Console

## Controls and Indicators

- 5” full color touch-screen, 800x480 pixels
- Three LED status indicators
- Three hardware function keys-buttons
- 280 mm gooseneck microphone

## Interconnections

**Rear**
- RJ45 for CAT-5 connection
- 3.5mm mini-jack for headset
- Additional power supply connector for long-line support

## Technical Specifications

### Electrical

<table>
<thead>
<tr>
<th>Component</th>
<th>Voltage</th>
<th>Power Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mains power supply</td>
<td>18–30 VDC PoE: 24 VDC</td>
<td>250 mA</td>
</tr>
</tbody>
</table>

### Performance

<table>
<thead>
<tr>
<th>Component</th>
<th>Frequency Response</th>
<th>THD</th>
<th>Output Level Max</th>
<th>Noise Gate Threshold</th>
<th>Attack Time</th>
<th>Release Time</th>
<th>Output Impedance</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSS AS/G2/G2E</td>
<td>-3 dB @ 200 Hz to 8 kHz</td>
<td>&lt; 1% @ 1 kHz</td>
<td>6 dBu</td>
<td>-84 dBu to -24 dBu</td>
<td>8 ms</td>
<td>100 ms</td>
<td>100 Ohm</td>
</tr>
<tr>
<td>PPM-IT5</td>
<td>-3 dB @ 100 Hz to 18 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Monitoring Speaker

- Impedance: 4 Ohm
- Output Power: 1 W @ 1 KHz
- Frequency Response: -3 dB @ 200 to 12 kHz

### Headset

- Connector: PSS AS/G2/G2E: 3.5 mm mini-jack
- PPM-IT5: 2 x 3.5 mm mini-jack

### System Connection

- Cable Type: CAT-5 (FTP)
- Length: 100 m

## Control and Indicators

### Controls and Indicators

<table>
<thead>
<tr>
<th>Controls and Indicators</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>5” full color touch-screen, 800x480 pixels</td>
<td></td>
</tr>
<tr>
<td>Three LED status indicators</td>
<td></td>
</tr>
<tr>
<td>Three hardware function keys-buttons</td>
<td></td>
</tr>
<tr>
<td>280 mm gooseneck microphone</td>
<td></td>
</tr>
</tbody>
</table>

## Interconnections

### Rear

- RJ45 for CAT-5 connection
- 3.5mm mini-jack for headset
- Additional power supply connector for long-line support

## Certifications and Approvals

### Regional Certifications

<table>
<thead>
<tr>
<th>Region</th>
<th>Voice Alarm</th>
<th>EN54-16 Certified 2012 CE – 0359 according to EN50130 – 4</th>
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</thead>
<tbody>
<tr>
<td>Europe</td>
<td>EN54-16 certified 2012 CE – 0359 according to EN50130 – 4</td>
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## Parts Included

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSS AS/G2/G2E</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>PSS-XX</td>
</tr>
<tr>
<td>1</td>
<td>CAT-5 cable, 1.5 m</td>
</tr>
<tr>
<td>PPM-IT5</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>PPM-IT5XX</td>
</tr>
<tr>
<td>1</td>
<td>CAT-5 cable, 1.5 m</td>
</tr>
<tr>
<td>1</td>
<td>AC-DC power adapter</td>
</tr>
</tbody>
</table>

### Mechanical

- Dimensions (H x W x D): 80 x 250 x 140 mm (3-1/5” x 9-4/5” x 5-1/2”)
- Weight: 1.1 kg (2.4 lbs)
- Color: RAL7016

### Environmental

- Operating temperature: -5°C ~ 55°C (23°F ~ 131°F)
- Storage temperature: -40°C ~ 70°C (-40°F ~ 158°F)
- Relative humidity: 15% to 90%
- Air pressure: 600 to 1100 h Pa
- Heat Dissipation: 20 BTU/hr

## Certifications and Approvals

### Voice Alarm

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

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[European CE certification mark]
PPM is a unidirectional addressable condenser paging microphone compatible with IDA8 and DIVA8 systems. PPM uses RS485 protocol over a single CAT-5 cable connection to transport both audio and power from the paging console to the system units. The PPM has 8 zone buttons with a sleek gooseneck microphone, providing both durability and aesthetics in a slim, stable chassis.

**MAIN CHARACTERISTICS**

- Desktop enclosure
- Monitored CAT-5 link to controllers and slaves
- Supervision of microphone capsule (not on slave units)
- Automatic gain control on microphone input
- 8-zone selection keys (Expandable with additional keypads)
- All-call key
- Power indicator
- EVAC indicator
- Status and fault indicator
- Monitor speaker

PPM is a unidirectional addressable condenser paging microphone compatible with IDA8 and DIVA8 systems. In accordance with BS5839, PPM is monitored by using RS485 protocol over a single CAT-5 cable connection to transport both audio and power from the paging console to the system units. The PPM has 8 zone buttons with a sleek gooseneck microphone, providing both durability and aesthetics in a slim, stable chassis.

The PPM enables live announcement to any pre-assigned zones (an optional SP version also allows for broadcasting the pre-recorded messages). The paging station has a gooseneck microphone, a push-to-talk button, zone selection keys and a monitor speaker. Buttons represent a single zone or a group of zones and be easily defined in the software using a simple matrix selection. All buttons can be programmed with drag & drop features from the software and each button can be programmed for PTT (Push To Talk) or latching functionality.

In addition to the zone LEDs, “Hold” and “Busy” LED signals make PPM an extremely user-friendly paging console. Thanks to the cardioids polar pick-up pattern, the unidirectional condenser microphone ensures the high-quality and directive signal pick-up with minimal interference from the surroundings.

The RS485 communication protocol allows daisy-chain wiring up to 300m on a single CAT-5 cable (FTP/STP) and makes each station easy to connect by using standard RJ45 connectors and the junction connection box (supplied with PPM). Also, the console can be powered locally with 24V DC supply.

**Note:** There are three versions of the PPM paging console with identical hardware and functionality but different firmware for compatibility with different systems.

- **PPM-AS:** Used with IDA8 system controllers and slaves, ATEIS Audio Processor, LAPG2T and UAPG2
- **PSM:** Used with DIVA8 system controllers
- **PPM-SP, PPM G2:** Used with ATEIS Audio Processor, LAPG2T and UAPG2
**PPM AS / PSM**

**DESKTOP PAGING CONSOLES**

### CONTROLS AND INDICATORS
- Three LED status indicators
- Activity indicators
- Zone selection buttons
- Gooseneck microphone
- Monitor speaker

### TECHNICAL SPECIFICATIONS

#### Electrical

- **Battery power supply**
  - Voltage: 18 - 26 VDC
  - Power consumption: 120 mA

#### Performance

- **Frequency response**
  - -3 dB @ 200 to 8 kHz
- **THD**
  - < 0.1% @ 1 kHz
- **Output level Max**
  - 6 dBu
- **Noise gate threshold**
  - -84 dBu to -24 dBu
- **Attack time**
  - 8 ms
- **Release time**
  - 100 ms
- **Output impedance**
  - 100 Ohms

#### Monitoring speaker

- **Impedance**
  - 4 Ohm
- **Output power**
  - 1 W @ 1 Khz
- **Frequency response**
  - 3 dB @ 200 to 12 kHz

#### System Connection

- **Cable type**
  - CAT-5, 10 pin (FTP)
- **Length**
  - 100 m

### INTERCONNECTIONS

- **Rear**
  - RJ45 for CAT-5 connection

### PARTS INCLUDED

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PPM / PSM-XX</td>
</tr>
<tr>
<td>1</td>
<td>Junction box</td>
</tr>
<tr>
<td>1</td>
<td>CAT-5 cable, 10pin, 1.5 m</td>
</tr>
</tbody>
</table>

### MECHANICAL

- **Dimensions(H x W x D)**
  - 50 x 105 x 190 mm
  - (2" x 4-1/5" x 7-1/2")
  - 350 x 105 x 190 mm
  - (13-3/4" x 4-1/5" x 7-1/2")
- **Weight**
  - 0.7 kg (1.54 lbs)
- **Color**
  - RAL7035

### 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
- **IP rating**
  - 30
- **Heat Dissipation**
  - 10 BTU/hr
The PSC microphone console, an Unidirectional Condenser Addressable Microphone which is compatible with all system units. By using RS485 protocol with daisy-chain wiring can support up to 100M over a single CAT5 cable connection, PSC transmits both audio data and power supply to system units. PSC comprises of 8 zones / 8 buttons with sleek condenser gooseneck microphone, and spring metal protection, providing durability and excellent aesthetics as well as enhancing up to 256 zones expansion via the additional keypad. The control buttons represent a single zone or a group of zones and are easily defined via the GUI of the system units using a simple Matrix selection.

Besides the original speaker, PSC also supports an external speaker to monitor the audio source. The unit offers “Hold” and “Busy” LED signals in addition to the zone LED’s, and these features allow an easy identification of Selection / Busy signals for users.

All buttons can be programmed with drag & drop features from the System unit GUI software and each button can be programmed for Push To Talk function or Latch functionality. The unidirectional condenser microphone warrants picking up the high quality of directive signal and less interference from the surroundings.

**CONTROLS AND INDICATORS**
- Goose-neck Microphone
- Fault / EVAC / Power / Talk / Hold / All Call / Release / Busy Indicator
- All Call/Release/Talk Button
- Microphone Connector
- Event Select Key

**INTERCONNECTIONS**
- Rear
  - RS485 for CAT-5 connection

**PARTS INCLUDED**
- Quantities | Components
  - 1 | PSC-XX
  - 1 | Junction Box
  - 1 | CAT-5 cable, 10pin, 1.5 m

**TECHNICAL SPECIFICATIONS**

**Electrical**
- Mains power supply
  - Voltage: 18~30 VDC PoE: 44~57 VDC
  - Power consumption: 150 mA

**Performance**
- Frequency response: -3 dB @ 200 Hz to 20 kHz
- THD: < 1% @ 1 kHz
- Output level Max: 6 dBu
- Noise gate threshold: -84 dBu ~ -24 dBu
- Release time: 100 ms
- Output impedance: 100 Ohm

**System connection**
- Cable type / Length: CAT-5,10 pin (FTP) / 100 m (max.)

**Monitoring speaker**
- Impedance: 8 Ohm
- Output power: 1 W @ 1 KHz
- Frequency response: -3 dB @ 200 to 20 kHz

**Mechanical**
- Dimensions (H x W x D): 116 x 220 x 483 mm (4-3/5” x 8-3/5” x 19”)
- Weight: 0.37 kg (0.8 lbs)
- Color: RAL7035

**Environmental**
- Operating temperature: -5°C ~ 55°C (23°F ~ 131°F)
- Storage temperature: -40°C ~ 70°C (-40°F ~ 158°F)
- Relative humidity: 15% to 90%
- Air pressure: 600 to 1100 h Pa
- IP Rating: 30
- Heat Dissipation: 12 BTU/hr
The CD-TOUCH paging console is a paging interface that allows call-paging, message broadcasting and DSP matrix parameter control. It contains a 5” full-color backlit touch-screen for simple, user-friendly operation. The screen offers up to 168 buttons across 14 pages which can be freely assigned in the software to any zone or group of zones. Each key contains a color-changing field indicating if the zone is occupied by a different process. In addition, the CD-TOUCH has 3 hardware keys that can be assigned within the system control software.

All paging parameters for site operation can be pre-programmed and stored within the console, including message triggering, level adjustment and pre-call chime setup. Zone assignment, naming and grouping can also be pre-configured.

The CD-Touch-XX units connect to a monitored bus on CAT-5 FTP/STP. This connection also provides Power Over Ethernet (POE). In case POE is not available, or if the cable run is greater than 100m, an additional power connection is provided with 24 VDC supply.

The ATEÏS range of security systems complies with current architectural demands requiring IP and/or fiber-optic networking to allow for even the most complex of system designs. ATEÏS 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.

CD-TOUCH is available in two different versions with identical hardware and functionality but different firmware for compatibility with different systems.

**CD-TOUCH-AS:** For use with IDA8 and ECS system controllers and slaves

**CD-TOUCH-G2:** For use with DIVA8 system controllers

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**MAIN CHARACTERISTICS**

- Wall-mounted metal enclosure with lockable cover
- Secured CAT-5 link to controllers and slaves
- Monitoring of microphone capsule
- Monitoring loudspeaker
- 5” full colour touch-screen, 800x480 pixels
- 14 pages of 12 buttons
- Power, Fault and Evac indicators
- Comprehensive system status information from touch-screen
- EN54-16 certified

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**SPECFICATIONS**

**CONTROLS AND INDICATORS**

- 5” full color touch-screen, 800x480 pixels
- Three LED status indicators
- Three hardware function keys-buttons
- Fireman’s fist microphone with PTT switch

**TECHNICAL SPECIFICATIONS**

**Electrical**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mains power supply</td>
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<tr>
<td>Power consumption</td>
<td>250 mA</td>
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</table>

**Performance**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency response</td>
<td>-3 dB @ 200 Hz to 8 kHz</td>
</tr>
<tr>
<td>THD</td>
<td>&lt; 1% @ 1 kHz</td>
</tr>
<tr>
<td>Output level Max</td>
<td>6 dBu</td>
</tr>
<tr>
<td>Noise gate threshold</td>
<td>-84 dBu – - 24 dBu</td>
</tr>
<tr>
<td>Attack time</td>
<td>8 ms</td>
</tr>
<tr>
<td>Release time</td>
<td>100 ms</td>
</tr>
<tr>
<td>Output impedance</td>
<td>100 Ohm</td>
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</tbody>
</table>

**Monitoring speaker**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impedance</td>
<td>4 Ohm</td>
</tr>
<tr>
<td>Output power</td>
<td>1 W @ 1 KHz</td>
</tr>
<tr>
<td>Frequency response</td>
<td>-3 dB @ 200 to 20 kHz</td>
</tr>
</tbody>
</table>

**System connection**

- Cable type / Length: CAT-5 (FTP) / 100 m (max.)

**Mechanical**

- Dimensions(H x W x D): 397 x 206 x 127 mm (15-3/5" x 8-1/10" x 5")
- Weight: 4.4 kg (9.7 lbs)
- Color: RAL7016

**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
- Heat Dissipation: 20 BTU/hr

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**PARTS INCLUDED**

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CD-Touch-XX</td>
</tr>
<tr>
<td>1</td>
<td>CAT-5 cable, 1m</td>
</tr>
</tbody>
</table>
The CD8 / CD16 paging console is a remote paging interface with Access Level 2 protection in compliance with EN54-16. Compatible with DIVA8 and IDA8 PAVA systems, the unit serves up to eight zones individually with an All-Call option. Zone selection buttons and Fireman microphone are encased in a heavy-duty IP30 wall-mounted metal box with a lockable door.

The CD8 / CD16 console use the same architecture as the PPM paging console, a junction box embedded into the enclosure multiple units by daisy-chaining wiring (only the first console in the chain is under monitored). The maximum distance between units is up to 100M. The zone buttons of CD8 / CD16 represent a single zone or group of zones and can be easily programmed through the system GUI using ‘drag and drop’ functionality. The Push-To-Talk button can be programmed for PTT or latching operation. The status indicators including Power, EVAC and Fault which show the status of all the zone are also provided with.

The CD8 / CD16 is powered over RS485 via CAT-5 (FTP/STP), however if power is not available over RS485 it can be locally powered by using a 24V DC supply.

Note: There are two versions of the CD8 / CD16 paging console with identical hardware and functionality but different firmware for compatibility with different systems.

CD8-AS / CD16-AS: Used with IDA8 system and ECS system controllers and slaves (one CD8 / CD16 connects to per PDC port with a maximum up to 10 units by daisy-chain wiring and external power supply should be used for every third unit).

CD8-G2 / CD16-G2: Used with DIVA8 system controllers (The maximum CD8 / CD16 units of configuring with daisy-chain wiring is 1 units (only the first unit is under monitored). An external power supply should be used for every third unit in the chain).

The ATEÏS range of security systems complies with current architectural demands requiring IP and/or fiber-optic networking to cater for any possible PAVA design, however complex. ATEÏS 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.
## Controls and Indicators

- Three LED status indicators
- Activity indicators
- Zone selection buttons
- LED test button
- Fireman microphone with Push To Talk

## Technical Specifications

### Electrical

<table>
<thead>
<tr>
<th>Component</th>
<th>Power supply</th>
<th>Interface</th>
<th>DC battery power requirements</th>
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<tbody>
<tr>
<td></td>
<td>DC/16 VDC</td>
<td>RS-485</td>
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### Performance

<table>
<thead>
<tr>
<th>Component</th>
<th>Frequency response</th>
<th>THD</th>
<th>Output level Max</th>
<th>Noise gate threshold</th>
<th>Attack time</th>
<th>Release time</th>
<th>Output impedance</th>
<th>Monitoring speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-3 dB @ 100 Hz to 18 kHz</td>
<td>&lt; 1% @ 1 kHz</td>
<td>6 dBu</td>
<td>-84 dBu to -24 dBu</td>
<td>8 ms</td>
<td>100 ms</td>
<td>100 Ohm</td>
<td>4 Ohm</td>
</tr>
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</table>

### System Connection

<table>
<thead>
<tr>
<th>Component</th>
<th>Cable type</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAT-5, 10pin (FTP)</td>
<td>100 m</td>
</tr>
</tbody>
</table>

## Controls and Indicators

- Three LED status indicators
- Activity indicators
- Zone selection buttons
- LED test button
- Fireman microphone with Push To Talk

## Interconnections

- Rear
- RJ45 for CAT-5 connection

## Certifications and Approvals

### Regional Certifications

Europe: EN54-16 certified 2012, CE – 0359 according to EN50130 – 4

### Parts Included

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CD8 / CD16</td>
</tr>
<tr>
<td>1</td>
<td>CAT-5 cable, 10pin, 1.5 m</td>
</tr>
</tbody>
</table>

### Technical Specifications

**Mechanical**

- Dimensions (H x W x D): CD8: 190 x 320 x 130 mm (7-1/2” x 12-3/5” x 5-1/10”), CD16: 130 x 350 x 130 mm (5-1/10” x 13-3/4” x 5-1/10”)
- Weight: CD8: 3.6 kg (7.9 lbs), CD16: 4.7 kg (10.4 lbs)
- Color: RAL7016

### 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
- IP rating: 30
- Heat Dissipation: CD8: 10 BTU/hr, CD16: 12 BTU/hr
The CDPM paging console is a wall-mounted cabinet remote with Access level 2 protection in compliance with EN 54-16. Compatible with ATEÏS audio processor, CDPM paging console interconnects over a dedicated RS485 for power, audio and data transmit. The RS485 communication protocol with daisy-chain wiring can support up to 100 m over CAT5 cable connection.

The CDPM supports 2 channels of music input. By pressing the button for selection, the two LED indicators shall light up and activate the music channel. The unit comprises of 24 zones / 24 buttons with Fireman microphone in a metal surface mount wall-box. It provides robust IP-30 protection. Each CDPM contains a PMM PS Master PCB with extension keypad and uses the same architecture as for the PPM AS series of microphone consoles. Each ATEÏS audio processor is capable to support up to 31 CDPM units per RS485 port in Master/Slave configuration.

The control buttons represent a single zone or a group of zones. All buttons can be programmed with drag & drop features from the ATEÏS Studio software. The PTT button can be programmed for Push To Talk function or for latching functionality.

The unit offers “Hold” and “Busy” LED signals in addition to the zone LED’s, and these features allow an easy identification of Selection/Busy signals for users. In addition, to meet the compliance with EN 54-16, POWER, FAULT and EVAC indicators are provided with.

Additional RCA connectors with selection buttons support local audio injection for commercial usage. The RS485 communication protocol offers daisy chaining of up to 300 m on a simple CAT5 cable, and yet makes outlets easy to connect via a standard RJ45 connector.

### Specifications

#### Controls and Indicators

- Fireman Microphone
- Power / Music Active / Talk / All Call / Release / Fault / Busy / Hold / EVAC / Indicator
- Talk / Music Selection / All Call / Release Button
- Monitoring Speaker
- Fireman Microphone / Music Input / Connector
- Event Select Key

#### Interconnections

- Rear
  - RS485 for CAT5 connection

#### Parts Included

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CDPM-XX</td>
</tr>
<tr>
<td>1</td>
<td>Junction Box</td>
</tr>
<tr>
<td>1</td>
<td>CAT-5 cable, 10pin, 1m</td>
</tr>
</tbody>
</table>

#### Technical Specifications

**Electrical**

- Mains power supply: 18~26 VDC
- Power consumption: 200 mA

**Performance**

- Frequency response: -3 dB @ 200 Hz to 20 kHz
- THD: < 0.1% @ 1 kHz
- Output level Max: -6 dBu
- Noise gate threshold: -84 dBu – – 24 dBu
- Attack time: 8 ms
- Release time: 100ms
- Output impedance: 100 Ohm

**System connection**

- Cable type / Length: CAT-5, 10pin (FTP) / 100 m (max.)

**Monitoring Speaker**

- Impedance: 8 Ohm
- Output power: 1 W @ 1 Khz
- Frequency response: -3 dB @ 200 to 20 kHz

**Mechanical**

- Dimensions (H x W x D): 220 x 483 x 68 mm (8-1/3” x 19” x 2-1/3”)
- Weight: 3.9 kg (8.6 lbs)
- Color: RAL7016

**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
- IP Rating: 30
- Heat Dissipation: 16 BTU/hr
The PCP paging console is a wall-mounted heavy duty remote with Access Level 2 protection in compliance with EN 54-16. Compatible with ATEÏS audio processor, PCP paging console interconnects over a dedicated RS485 for power, audio and data transmit. The RS485 communication protocol with daisy-chain wiring can support up to 100 m over CAT5 cable connection.

The unit comprises of 16 zones / 16 buttons with Fireman microphone in a metal surface mount wall-box. It provides robust IP-30 protection. Each PCP contains a PMM PS Master PCB with extension keypad and uses the same architecture as for the PPM AS series of microphone consoles. Each ATEÏS audio processor is capable to support up to 31 PCP units per RS485 port in Master/Slave configuration.

The control buttons represent a single zone or a group of zones. All buttons can be programmed with drag & drop features from the ATEÏS Studio software. The PTT button can be programmed for Push To Talk function or for latching functionality.

The unit offers “Hold” and “Busy” LED signals in addition to the zone LED’s, and these features allow an easy identification of Selection/Busy signals for users. In addition, to meet the compliance with EN 54-16, POWER, FAULT and EVAC indicators are provided with.

**CONTROLS AND INDICATORS**
- A telephone styled microphone
- Fault / EVAC / Power / Talk / Hold / All Call / Release / Busy Indicator
- All Call/Release/Talk Button
- Microphone Connector
- Event Select Key

**INTERCONNECTIONS**
- Rear
  - RS485 for CAT-5 connection

**PARTS INCLUDED**

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PCP-XX</td>
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<tr>
<td>1</td>
<td>Junction Box</td>
</tr>
<tr>
<td>1</td>
<td>CAT-5 cable, 10pin, 1m</td>
</tr>
</tbody>
</table>

**TECHNICAL SPECIFICATIONS**

**Electrical**
- Mains power supply
  - Voltage: 18–26 VDC
  - Power consumption: 150 mA

**Performance**
- Frequency response: -3 dB @ 200 Hz to 20 kHz
- THD: < 0.1% @ 1 kHz
- Output level Max: -6 dBu
- Noise gate threshold: -84 dBu – – 24 dBu
- Attack time: 8 ms
- Release time: 100 ms
- Output impedance: 100 Ohm

**System connection**
- Cable type / Length: CAT-5, 10pin (FTP) / 100 m (max.)

**Monitoring speaker**
- Impedance: 8 Ohm
- Output power: 1 W @ 1 KHz
- Frequency response: -3 dB @ 200 to 20 kHz

**Mechanical**
- Dimensions (H x W x D): 220 x 346 x 128 mm (8-3/5” x 13-3/5” x 5”)
- Weight: 3 kg (6.6 lbs)
- Color: RAL7016(Main)

**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
- IP Rating: 30
- Heat Dissipation: 12 BTU/hr
### URC / URC 200 / DNM

**URC Programmable Remote Controller**

The URC AS can be fully programmed via ATEIS Studio software to adjust every setting: level control, preset, components' adjustments, etc. An elegant OLED for displaying information of parameters or the status. It gives extreme simple design and cost-effective consideration of with only Two buttons [EXIT], [BACK] and a knob on control interface. The RS485 communication protocol allows daisy-chain wiring up to 32 units, providing with a long distance from the audio processor.

**Mechanical**
- Dimension = 84mm (W) x 33mm (L) x 84mm (H)
- 3-3/10" (W) x 1-3/10" (L) x 3-3/10" (H)
- Weight = 0.08KG (0.17 lbs)

**URC200 / Ethernet Universal Programmable Remote Controller**

The URC200 is a programmable remote controller (TCP/IP) for the PAVA system and the IP-media streamers with Terracom IP Media software. The URC200 is powered over IP and easy to integrate with current demands for room controllers like light, curtains, sound and video control. The full color display is easy to read and has a low-power consumption to allow for long lines and multiple devices into one system.

**Mechanical**
- Dimension = 140mm (W) x 108mm (H) x 34mm (L)
- 5-1/2" (W) x 4-1/4" (H) x 1-3/10" (L)
- Weight = 0.35Kg (0.7 lb)

**DNM Digital Noise Sensing Microphone**

With built-in Electronic Condenser microphone (omnidirectional), DNM enhances the ability to detect the surrounding background noise. With the 0 dB modulation through the Audio Processor, DNM component provides the Automatic Gain Control feature and automatically adjusts the output level of loudspeaker under any situation.

**INTERCONNECTIONS**

- Rear
  - RJ45 for CAT-5 connection (POE)
  - RS485 port for 5.08 mm EUR0 Block (4Pin)

**PARTS INCLUDED**

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
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<tbody>
<tr>
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<td>DNM-485 / DNM Ethernet</td>
</tr>
<tr>
<td>1</td>
<td>CAT-5 cable, 100 m</td>
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**TECHNICAL SPECIFICATIONS**

**Electrical**
- Power supply: 18-30 VDC (if no POE available)
- Battery Holder: 250 mA

**Performance**
- Frequency response: -1 / +1 dBu 50–16 kHz@ 0 dBu
- Sampling rate: 48 kHz Only 1 selection
- Equivalent: -80 dBu 50–16 kHz @ 600 ohm
- THD+N: 0.2 % 50–16 kHz @ 0 dBu

**Microphone**
- Sensitivity: (60 - 120 dB) ±5dBA
- Frequency response: 50Hz to 16kHz @ -3 dB
- THD: <0.2% @ 1 kHz
- Input: -40 dBu @ 1 kHz
- EIN: < -80 dB

**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
- IP Rating: 30
- Heat Dissipation: 20 BTU/hr

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**Connector**

<table>
<thead>
<tr>
<th>Ethernet port</th>
<th>CAT -5 Cable</th>
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<tbody>
<tr>
<td>RS485 port</td>
<td>5.08 mm EUR0 Block (4Pin)</td>
</tr>
</tbody>
</table>

**System connection**

<table>
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<tr>
<th>Cable type</th>
<th>CAT-5 (FTP)</th>
</tr>
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<tbody>
<tr>
<td>Max Length</td>
<td>100 m</td>
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</table>

**Mechanical**

<table>
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<th>Dimensions</th>
<th>100mm(Diameter) x 130mm(H)</th>
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<tbody>
<tr>
<td>Weight</td>
<td>0.13kg (0.28 lbs)</td>
</tr>
<tr>
<td>Color</td>
<td>RAL7035</td>
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</tbody>
</table>

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**Technical Specifications**

**Electrical**
- Power supply: 18-30 VDC (if no POE available)
- Battery Holder: 250 mA

**Performance**
- Frequency response: -1 / +1 dBu 50–16 kHz@ 0 dBu
- Sampling rate: 48 kHz Only 1 selection
- Equivalent: -80 dBu 50–16 kHz @ 600 ohm
- THD+N: 0.2 % 50–16 kHz @ 0 dBu

**Microphone**
- Sensitivity: (60 - 120 dB) ±5dBA
- Frequency response: 50Hz to 16kHz @ -3 dB
- THD: <0.2% @ 1 kHz
- Input: -40 dBu @ 1 kHz
- EIN: < -80 dB

**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
- IP Rating: 30
- Heat Dissipation: 20 BTU/hr
DialPad is a touch dial, cost-effective tabletop controller that connects to IDA8 or ECS audio processor. By both on Local and SIP call, users shall connect to either external telephone set with phone line or DialPad with Ethernet connector.

To activate each item by touch provides users with a user-friendly instruction. DialPad can be operated by using the touch panel – dialing, mute, volume controls, 3-way calling, contact lists, etc. The OLED on the front panel enhances a simple design, and the secured device information for users to monitor, included the connection status and dialing information. All the items can be fully programmed with Drag & Drop features from the system unit GUI software to adjust every custom settings and each item can be operated via ATÉS Studio Software or DialPad simultaneously.

DialPad provides a quick-access use with a long-distance calls and multi-paging. Connecting to Wireless Transceiver device, its capabilities provide the freedom to limit the distance with you from room to room without moving the base unit, with secure, the password protecting to each calls allows you to confirm the callers to whom have the authority for multi-paging.

Wireless Transceiver is a handy remote which connects to IDA8 or ECS audio processor and provides the wireless network for DialPad Device. By connecting to either two kinds of ports (RS485, RS232), the Wireless Transceiver makes it easy to set up and operate with audio central unit and DialPad device. Its capabilities enhance the freedom to limit the distance with you from room to room without moving the base unit.

### SPECIFICATIONS

#### CONTROLS AND INDICATORS

**Dialpad Front**
- Telephone Keypad / Function Keypad / Panel Display / Status LED / Buzzer

**Dialpad Rear**
- RS485 connector / Battery Holder
- Power LED / Status LED
- RS485 / RS232 / 24VDC connector

**Wireless Transceiver Front**
- Telephone Keypad / Function Keypad / Panel Display / Status LED / Buzzer

**Wireless Transceiver Rear**
- Power LED / Status LED
- RS485 / RS232 / 24VDC connector

#### INTERCONNECTIONS

**Dialpad Rear**
- RS485 for CAT-5 connection (PoE)
- RJ45 for CAT-5 connection (POE)
- RS232 connector

**Wireless Transceiver Rear**
- RJ45 for CAT-5 connection (POE)
- RS232 connector

#### PARTS INCLUDED

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wireless TransceiverXX / DialPadXX</td>
</tr>
<tr>
<td>1</td>
<td>CAT-5 cable, 500m</td>
</tr>
</tbody>
</table>

#### TECHNICAL SPECIFICATIONS

**Electrical**
- **Power supply**
  - **Dialpad** 18 - 24 VDC
  - **Wireless Transceiver** 24 VDC
- **Battery Holder**
  - **Dialpad** AAA Battery x 4
  - **Wireless Transceiver** 30 mA

**Performance**
- **Panel Display**
  - **Dialpad** 128*32 Pixels Monochrome (White)
  - **Buzzer Sound** >85dB @10cm

**System connection**
- **Dialpad** CAT-5 (FTP) / 100 m (max.)
- **Wireless Transceiver** CAT-5 (FTP) / RS232
  - 500 m / 12 m

**Mechanical**
- **Dimensions (H x W x D)**
  - **Dialpad** 66 x 255 x 108 mm
  - **Wireless Transceiver** 30 x 100 x 67 mm (1-1/5’ x 4” x 2-5/8”)

**Weight**
- **Dialpad** 0.5 kg (1.1 lbs)
- **Wireless Transceiver** 0.1 kg (0.22lbs)

**Color**
- **RAL7016**

**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
- **IP Rating** 30
ALARM INPUT INTERFACE FOR IDA8-SYSTEM AND DIVA-SYSTEM

URGP

The URGP is a contact interface extension unit to the IDA8 System. Each URGP32in / URGP 16I16O provide 32 /16 additional alarm inputs. Each input is monitored and can be programmed to trigger a digital audio message into a specific zone or group of zones. The URGP is linked to the System units through an RS232 /RS485 monitored serial link.

MAIN CHARACTERISTICS

- Desktop enclosure
- Secured RS232/RS485 link to controllers and slaves
- 32 alarm inputs
- Status and fault indicator
- EN54-16 certified

SPECIFICATIONS

CONTROLS AND INDICATORS

Front
- EVACUATION active indicator
- FAULT indicator
- POWER indicator

INTERCONNECTIONS

Rear
- RJ45
- RS232

CERTIFICATIONS AND APPROVALS

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

TECHNICAL SPECIFICATIONS

Electrical
Mains power supply
Voltage 18~26 VDC
Power consumption 30 mA

Performance
Evacuation inputs
Contact mode 5 VDC
Voltage mode -6 dBu
Monitoring resistor 4.7k Ohm

System connection
Cable type / Length CAT-5 (FTP) / 100 m (max.)

Mechanical
Dimensions(H x W x D) 44 x 140 x 75 mm
(1-3/4" x 5-1/2" x 3")
Weight 0.5 kg (1.1 lbs)
Color RAL7016

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
IP Rating 30
# List Of Peripherals

<table>
<thead>
<tr>
<th>Peripherals</th>
<th>Connection</th>
<th>Maximum number (per port)</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSS AS</td>
<td>PDC port</td>
<td>1</td>
<td>IDA8</td>
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<tr>
<td>PSS G2</td>
<td>PSS / PSM port</td>
<td>1</td>
<td>DIVA8G2</td>
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<tr>
<td>PSS G2E</td>
<td>Ethernet</td>
<td>8</td>
<td>DIVA8G2</td>
</tr>
<tr>
<td>PPM-IT5</td>
<td>Ethernet</td>
<td>1 (Active Over Eth.)</td>
<td>IDA8</td>
</tr>
<tr>
<td>PPM AS</td>
<td>PDC port</td>
<td>32</td>
<td>IDA8</td>
</tr>
<tr>
<td>PSM</td>
<td>PSS / PSM port</td>
<td>10</td>
<td>DIVA8G2</td>
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<tr>
<td>PSC</td>
<td>PDC port</td>
<td>32</td>
<td>IDA8</td>
</tr>
<tr>
<td>CD8 / CD16</td>
<td>PDC port (IDA8), PSS / PSM port (DIVA8G2)</td>
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<td>IDA8/DIVA8G2</td>
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<tr>
<td>CD-Touch</td>
<td>PDC port (IDA8), PSS / PSM port (DIVA8G2)</td>
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<td>IDA8/DIVA8G2</td>
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<tr>
<td>PCP / CDPM</td>
<td>PDC port</td>
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<td>IDA8</td>
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<td>DialPad / Wireless Transceiver</td>
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<td>URC-AS</td>
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<td>URC200AS</td>
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<td>Eth. Limit</td>
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<tr>
<td>DNM-485</td>
<td>PDC port</td>
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<td>IDA8</td>
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<tr>
<td>DNM-Ethernet</td>
<td>Ethernet</td>
<td>Eth. Limit</td>
<td>IDA8</td>
</tr>
<tr>
<td>URGP32in / URGP 16160</td>
<td>PDC port</td>
<td>1</td>
<td>IDA8</td>
</tr>
</tbody>
</table>

**Eth. Limit:** The maximum number of IP that can be assigned over the network.

**Max. Number:** The max. number of peripherals through per PDC port by using a Junction Box.

The devices which connected to PDC port, PSS port and PSM port are all powered over RS485 communication protocol.
### Ordering Information

<table>
<thead>
<tr>
<th>DIVA - Compact PAVA System</th>
<th>Bridging Power Amplifier</th>
<th>Wall-mounted Level Sources Remote Selector</th>
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</thead>
<tbody>
<tr>
<td>DIVA-8MG2 Master Unit</td>
<td>BPA-1000 1 x 1000W</td>
<td>RAC 5 5 Steps</td>
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<tr>
<td>DIVA-8S Slave Unit</td>
<td>BPA-2120 2 x 120W</td>
<td>RAC 8 8 Steps</td>
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<td>BPA-2240 2 x 240W</td>
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<td>BPA-2480 2 x 480W</td>
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<td>DPAfour-250* 4 x 250W</td>
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<td>SPA-2060 2 x 60W</td>
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<td>SPA-2120 2 x 120W</td>
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<td>SPA-2240 2 x 240W</td>
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<td>MPA-120 120W</td>
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