

PUBLIC ADDRESS AND VOICE ALARM COMPACT SYSTEM

Compact SYSTEM

**Public address & voice alarm
system, EN 54 certified.
Suitable for both centralized or
distributed installations.
Scalable and modular system
Linked through the corporate data
network
A system for hotels, hospitals,
commerce, businesses, industry...**



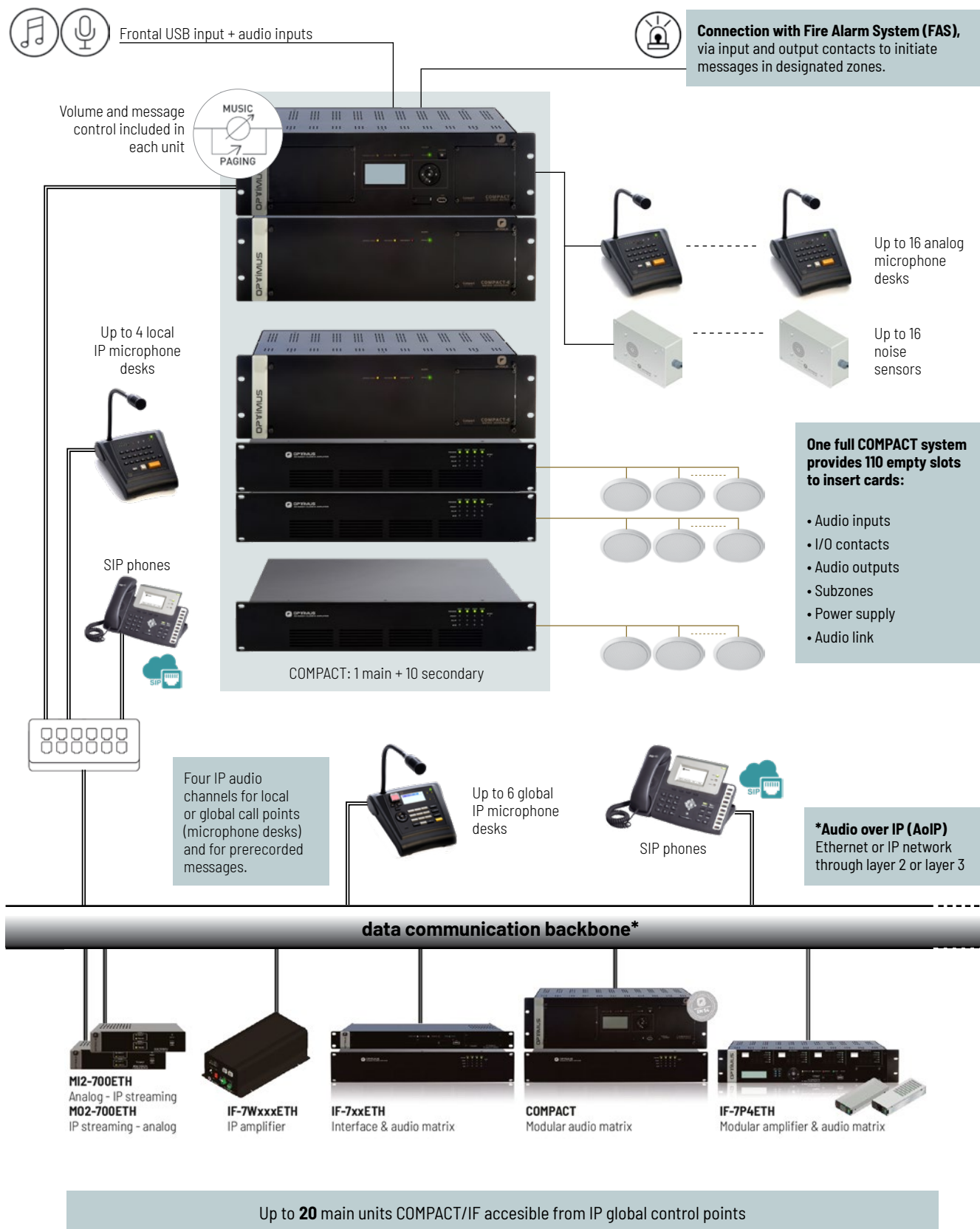
- Alarm, prerecorded and live messages.
- Music broadcasting.
- Management of speaker zones.
- Microphone desks connected by bus or through the corporate data network.
- Reception of 4 simultaneous digital audio channels via IP connection.
- Output/input contacts for emergency functions, message activation, zone control ...
- Audio outputs with individual volume control.
- Critical path supervision: speaker lines, amplifiers, cards, power, contacts, prerecorded messages...

- Call point software for live or prerecorded messages, alarm notification ...
- PC integration and direct integrations (XML, API/ DLL).
- Control data reception and transmission via IP connection.
- Compatible with SIP protocol.
- Linked systems through corporate network and accessible from IP points (microphones, SIP phones ...).
- Double Ethernet connection and double power supply input for redundant installations.



COMPACT SYSTEM

Block diagram



PUBLIC ADDRESS AND VOICE ALARM

Modular audio matrix with IP connection

COMPACT

Modular audio matrix with IP connection and monitoring functions for fully managing PA and voice alarm systems. It has 10 slots for inserting cards and is expandable using COMPACT-E units (each with 10 more slots) up to a maximum of 10 units.

The matrix is the main element of the COMPACT control system and includes the connections, monitoring system and indicators required for complying with regulation EN54-16 regarding fire evacuation.



Card slots	10
Ethernet communication	2 x RJ45 for installations with redundancy IP Layer 3 & Layer 4 Network
Bus CAN	500 kbit/s (with COMPACT-E) 33.3 kbit/s (with peripherals)
VoIP	SIP RFC3261 G711 (PCMA & PCMU), G722 & L16
Input contacts	3, NC/NO configurable. Supervisable
Output contacts	3, NC/NO configurable. 1 FAIL relay
Audio inputs	1 front USB 2.0 for music (wav, mp3 & ogg)
Audio channels	16
SD memory	16 GB, for pre-recorded messages
Power supply	24 V DC / 730 mA (without cards). Dual power supply (primary and secondary)
Weight	8.5kg
Finisch	Black painted iron RAL9005
Dimensions (mm)	482.6 x 133 x 280. For 19" rack (3 u)

- Supervision functions for speakers, amplifiers and inserted cards.
- Redundancy, with double connection to IP and duplicate power supply input.
- Micro SD card to store pre-recorded messages and add DVA (Digital Voice Announcer) functionality.
- Internal bus with 16 audio channels.
- The control software receives information about the system status through the data network.
- Connection with external equipment: VoIP (SIP), XML commands, external systems (PIDS, Scada), DLL...



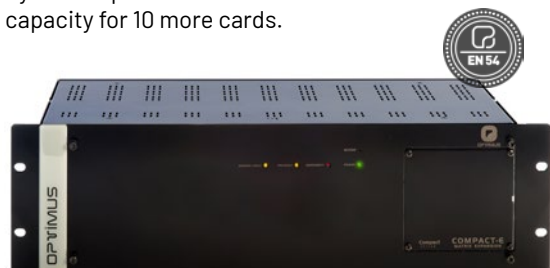
ME-200B

Designed to be used for emergency broadcasts made by firemen in order to evacuate building occupants in emergency situation. With hand-held microphone to send messages directly, the panel allows the activation of the emergency mode and sends prerecorded messages of warning and evacuation.

To be installed on the front of the audio matrix COMPACT.

COMPACT-E

System expansion with capacity for 10 more cards.



COMPACT SYSTEM

Insertable cards COMPACT & COMPACT-E

UMX-2M3 » 2 audio inputs for music

- RCA stereo connector with L&R internal sum for each input.
- Audio level adjustment.
- Configurable sensitivity via software: AUX H (775 mV) & AUX L (100 mV)

UMX-EA3 » 2 audio inputs

- Audio level adjustment.
- Possibility to pre-set the zones for each input, activated by priority (PTT/VOX).
- Signal of activated zones ACK.
- Configurable sensitivity 0 dB | -20 dB | -60 dB | -60 dB + speechfilter

UMX-C16 » I/O contacts

- 16 input contacts with supervision possibility.
- 4 output contacts (dry contact or referred to ground).

UMX-2SA » 2 audio outputs

- 2 x 0 dB / 600 Ω & priority (RJ45).
- Speakers line & amplifier measurement.
- Transformer balanced outputs.
- Volume control from front panel or remote device.
- Fault detection and indication in amplifier or speaker lines.
- Bass / treble equalization or 10 bands from PC.

UMX-MC6 » 6 sub-zone outputs

- Security paging (compatible with 3 or 4 wire attenuators).
- Double 100 V input: channel I (music) and channel II (warnings and / or backup).

UMX-LNK | UMX-LNKE » audio link

- Links audio channels 1 to 4 and the emergency channel between COMPACT and COMPACT-E.
- Simplified wiring (2 x RJ45), suitable for linking equipment in different racks.
- Allows you to create a ring bus.
- Notification of disconnection.

UMX-PS » power supply

- Provides primary power to the audio matrix.
- 100-240 V AC input.
- 24 V DC output.

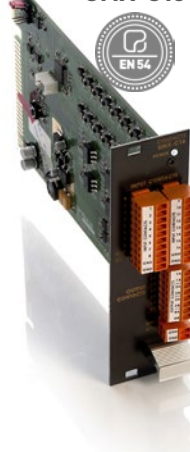
UMX-2M3



UMX-EA3



UMX-C16



UMX-2SA



UMX-MC6



UMX-LNK



UMX-PS



PUBLIC ADDRESS AND VOICE ALARM

Interface - audio matrix with IP connection

IF-702ETH » 2 outputs

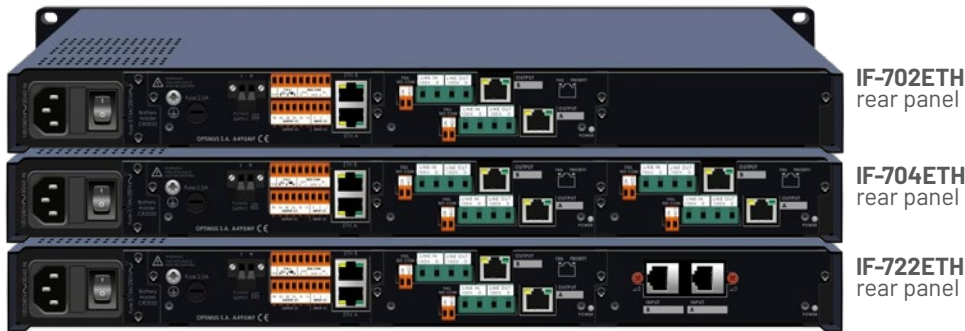
IF-704ETH » 4 outputs

IF-722ETH » 2 inputs & 2 outputs

Interface for connecting power units anywhere in the network. It receives messages from global IP microphone desks and SIP telephones of a COMPACT system, as well as the general music channels. It has 16 GB for storing audio messages. IP interfaces can be equipped with the ME-200D microphone.



IF-702ETH



IF-702ETH
rear panel

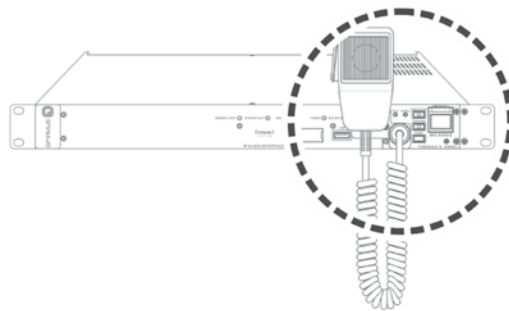
IF-704ETH
rear panel

IF-722ETH
rear panel



ME-200D

Fire panel to activate or deactivate emergency mode, start or stop alert and evacuation messages and emit voice messages with absolute priority during an evacuation. Includes a supervised handheld microphone and monitor speaker.



The equipment is installed on the front of IF interfaces and IF-P modular IP amplifiers

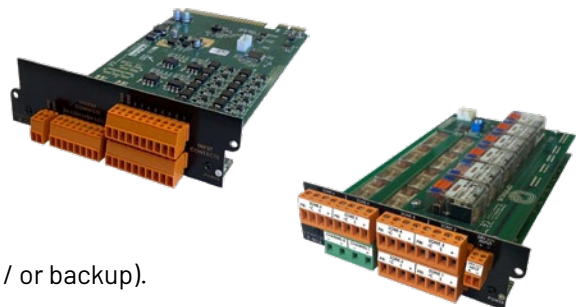
Insertable cards in IF-702ETH

IF-C16 | I/O contacts

- 16 input contacts with supervision possibility.
- 4 output contacts (dry contact or referred to ground).

IF-MC6 | 6 sub-zone outputs

- Security paging (compatible with 3 or 4 wire attenuators).
- Double 100 V input: channel I (music) and channel II (warnings and / or backup).



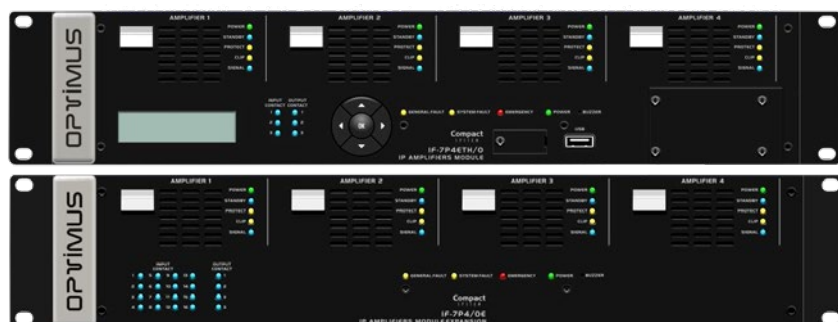
COMPACT SYSTEM

Modular IP Amplifier

IF-7P4ETH/0 » ma

IF-7P4/OE » expansion (x 10)

Audio interface with IP connection (COMPACT system), with DSP and monitoring functions. With four slots that allow to insert module amplifiers from MP series (not included) and four local analog inputs (program / priority) of configurable sensitivity. Each zone output has connections for A / B lines and input for backup amplifier. With Dual Ethernet connection to decode up to 4 simultaneous IP channels. IP amplifiers can be equipped with the ME-200D microphone.



Each IF-7P4ETH/0 can be expanded with up to 10 x IF-7P4/OE, with four additional spaces to accommodate power modules. The main equipment and the extensions communicate via CAN bus and the audio channels are linked through the **IF-PLINK** plug-in module.

ME-200D

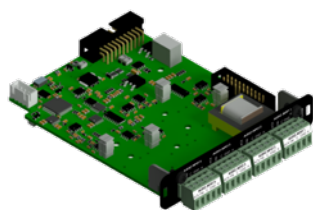
Fire panel to activate or deactivate emergency mode, start or stop alert and evacuation messages and emit voice messages with absolute priority during an evacuation. Includes a supervised handheld microphone and monitor speaker.



Insertable cards

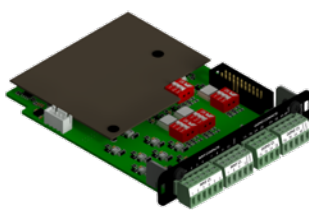
IF-PIA4 | 4 audio inputs

- 4 analog audio inputs.
- For IF-7P4ETH/0.



IF-PCT | I/O contacts

- 10 input contacts and 4 output contacts.
- For IF-7P4ETH/0 and IF-7P4/OE.



Power modules

Power supply 90 ~ 240 V AC

- MP-120WD1** | 120 W
- MP-150WD1** | 150 W
- MP-250WD1** | 250 W
- MP-300WD1** | 300 W
- MP-460WD1** | 460 W



Power supply 90 ~ 240 V AC / 24 V DC

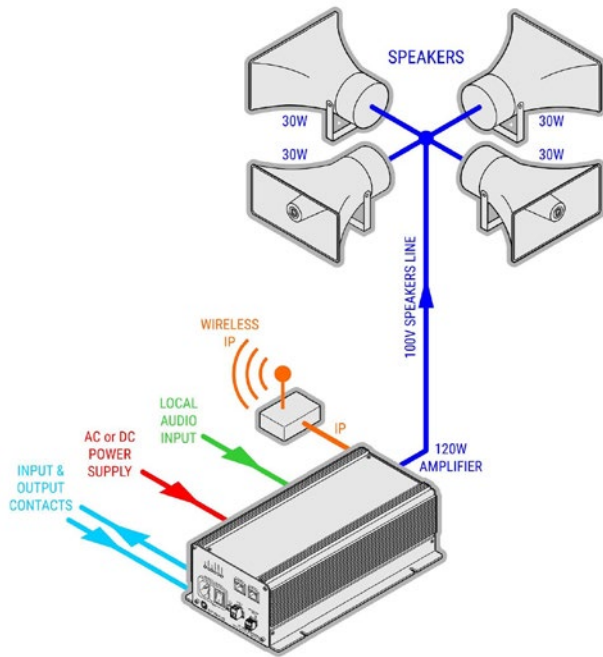
- MP-60WDC** | 60 W
- MP-120WDC** | 120 W
- MP-150WDC** | 150 W
- MP-250WDC** | 250 W
- MP-300WDC** | 300 W
- MP-460WDC** | 460 W



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IP Amplifier

Amplifiers with IP connection (COMPACT system) that receive up to 4 simultaneous IP audio channels through the dual Ethernet link. They include a security relay for messages, input (3) and output (3) contacts and local audio input. Available in various powers and in two versions, the standard one with mains power and the one prepared for battery power, compatible with voice alarm systems. Prepared to be installed on the wall or on any surface.



Power supply 90 ~ 240 V AC

IF-7W120ETH | 120 W
IF-7W150ETH | 150 W
IF-7W250ETH | 250 W
IF-7W300ETH | 300 W
IF-7W460ETH | 460 W



Power supply 90 ~ 240 V AC / 24 V DC

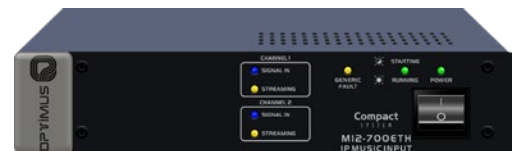
IF-7W60DCETH | 60 W
IF-7W120DCETH | 120 W
IF-7W150DCETH | 150 W
IF-7W250DCETH | 250 W
IF-7W300DCETH | 300 W
IF-7W460DCETH | 460 W



Audio converters

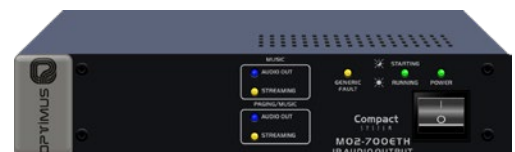
MI2-700ETH » analog audio → streaming IP

Two-channel analog audio converter (usually from musical sources) to digital format for COMPACT systems. It allows the simultaneous broadcast of both music channels through the IP network in streaming. They can be placed at any point in the installation without reducing the capacity of global microphones.



MO2-700ETH » streaming IP → analog audio

Audio converter of the COMPACT system, from digital audio to analog audio, with one output for messages and another for music. They can be placed at any point in the installation as one more point of the COMPACT system (maximum 20 units in total).



COMPACT SYSTEM

Microphone stations



DC-700ETH

Live or pre-recorded messages broadcasting through the Ethernet network, supervision of the system and configuration of parameters. Also prepared for broadcast made by firemen in emergency situations. Equivalent to a VACIE remote control unit.

- Sending notifications to zones / groups.
- Activation of pre-evacuation & evacuation messages (EN 54-16).
- Activation of generic prerecorded messages.
- Alerts, with or without warning tone (gong).
- Music source connection and music program sending via Ethernet.
- Alarm LED.
- System alarm list.
- Monitor speaker.

DC-700ETH/T

Desktop control unit with 7" touch screen and microphone desk with connection to Ethernet (IP). It allows the emission of messages through the IP network in streaming as well as unit control and configuration parameters.

- Digital audio and control data via an IP connection.
- Ethernet connection.
- Public address control software (call point) with a graphical interface.
- USB input for music broadcast..
- Graphic display with configurable position of buttons and background images to facilitate the user operation.
- Announcements with or without a pre-announcement tone (Gong).
- Recording and sending adhoc messages.
- Different operating modes: Zones Selection mode and Emergency mode.
- Monitor speaker.



DT-700ETH

Tactile control central and microphone paging desktop unit with ethernet connection. Allows broadcasting announcements through an IP network in streaming as well as unit control and configuration parameters.

- Digital audio and control data via an IP connection.
- Ethernet connection.
- AC 100-240 full range power supply.
- PA Manager control software.
- Graphic display with configurable position of buttons and background images to facilitate the user operation.
- IP control of all the situations in the installation:
- Recording and sending adhoc messages.
- Different operating modes: Zones Selection mode and Emergency mode.
- Monitor speaker.

PUBLIC ADDRESS AND VOICE ALARM

Microphone desks

ME-200C | ME-200CZ | ME-200CZW

Microphone desk with bus connection for issuing emergency messages (firefighters) and directing the evacuation of premises in case of fire or similar circumstances. With security key and buttons to activate the emergency mode. It incorporates a warning microphone.



ME-200C

The models
ME-200CZ (desktop)
ME-200CZW (wall mounted)

they also incorporate
12 configurable keys for
sending messages to
individual zones, groups of
zones or activation of pre-
recorded messages.



ME-200CZ



ME-200CZW

MD-30C

Microphone desk with 18 configurable keys for sending messages to individual zones, groups of zones or to activate prerecorded messages. Bus connection.



MD-30KE

18-key extension module.

MD-30ETH

Microphone desk with 18 configurable keys for sending messages to individual zones, groups of zones or to activate prerecorded messages. Ethernet connection.



Noise sensor

NS-CAN

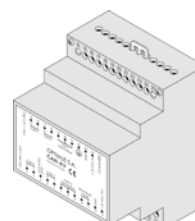
Noise sensor for bus connection to a COMPACT system (up to 16 units).



Speed adapter

CAN-AV

Bus speed adapter between COMPACT and NS-CAN / MD30C in systems with COMPACT-E expansion units.



COMPACT SYSTEM

Digital class D power units

DA-500D2 » 2 x 500 W

DA-500D4 » 4 x 500 W

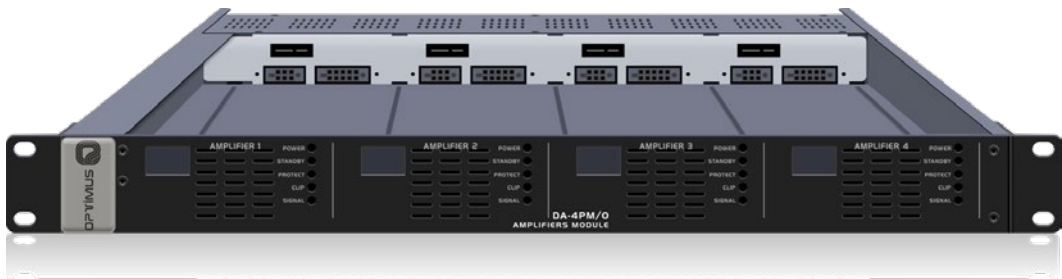
Digital power unit with 2 or 4 outputs of 500 W of RMS power at 100V. Its design allows high energy efficiency and minimum heat generation (class D), in addition to a reduction of the rack space required. It offers protection circuits and voltage, current and temperature monitoring, with automatic disconnection to avoid possible overload, short circuit or overheating.



	DA-500D2	DA-500D4
Power supply	230 V AC, 50 ~ 60 Hz / 24 V DC	230 V AC, 50 ~ 60 Hz / 24 V DC
Channels	2	4
Power per channel	2 x 500 W (100 V)	4 x 500 W (100 V)
Inputs	2 x aux 0 dB, 10 kohm, unbalanced	4 x aux 0 dB, 10 kohm, unbalanced
Frequency Response	80 ~ 16.000 Hz (+1 dB, -3 dB)	80 ~ 16.000 Hz (+1 dB, -3 dB)
S/N Ratio	> 80 dB	> 80 dB
Total Harmonic Distortion	< 0,5 % (1/3 rated power)	< 0,5 % (1/3 rated power)
Maximum dissipation power	2 x 750 W at 24 V C	4 x 750 W at 24 V C
Dimensions (mm)	484 x 88.8 x 445,5 (2u rack mount)	484 x 88.8 x 445,5 (2u rack mount)
Weight	8.03 kg	9.80 kg

DA-4PM/0 » hasta 4 x 460 W

Modular power unit with four slots for MP series class D power modules, with independent power supply and replaceable with the equipment running (hot swap). The power unit has a standby mode and, together with the high efficiency (90%) of the class D power modules, facilitates considerable energy savings.



Power units

Power supply 90 ~ 240 V AC

- MP-120WD1 | 120 W**
- MP-150WD1 | 150 W**
- MP-250WD1 | 250 W**
- MP-300WD1 | 300 W**
- MP-460WD1 | 460 W**



Power supply 90 ~ 240 V AC / 24 V DC

- MP-60WDC | 60 W**
- MP-120WDC | 120 W**
- MP-150WDC | 150 W**
- MP-250WDC | 250 W**
- MP-300WDC | 300 W**
- MP-460WDC | 460 W**



PUBLIC ADDRESS AND VOICE ALARM

Emergency power supply

Emergency power supply and battery charger (battery not included) in 2U and 19" rack format, for voice evacuation and alarm systems (PA / VA), certified according to EN 54-4.

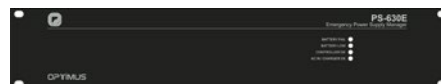
MS-150

With 6 fused outputs that can be used with a load of up to 40 A and 3 additional outputs with a maximum load of 5 A. Total maximum load of 150 A.



PS-630E

With 6 fused outputs that can be used with a load of up to 30 A. Total maximum load of 180 A.



Control and configuration

COM-PAM » server

COM-PCC » computer

Control computers with the necessary hardware and software for managing the units of the PA control systems. The programs installed and configured in-factory for each application, allows the configuration, programming and supervision of the system. The **COM-PAM** hardware is prepared for constant operation (24/7) and comes with a three-year "in situ" manufacturer guarantee against errors or breakdowns in the operating system or the machine.



- Live or pre-recorded messages.
- Selection/editing of zones and groups of zones.
- Graphic interface with plans and presentation of units on them.
- Assignment of priority levels, musical programs, pre-recorded announcements...
- Control and dynamic assignment of announcement volume.
- Digital announcement recording (WAV, MP3, WMA...)
- Time programming.
- User profiles.
- System parameters and unit status on-screen supervision.
- Events log and alarm files.

Software

SCM-01 | Control and setup (*Call Point*)

SCS-01 | For integration with third parties

SL7-CM | Streaming music channels

Microphone desk

ME-F30SMP

Microphone with flexible gooseneck for broadcasting of announcements.

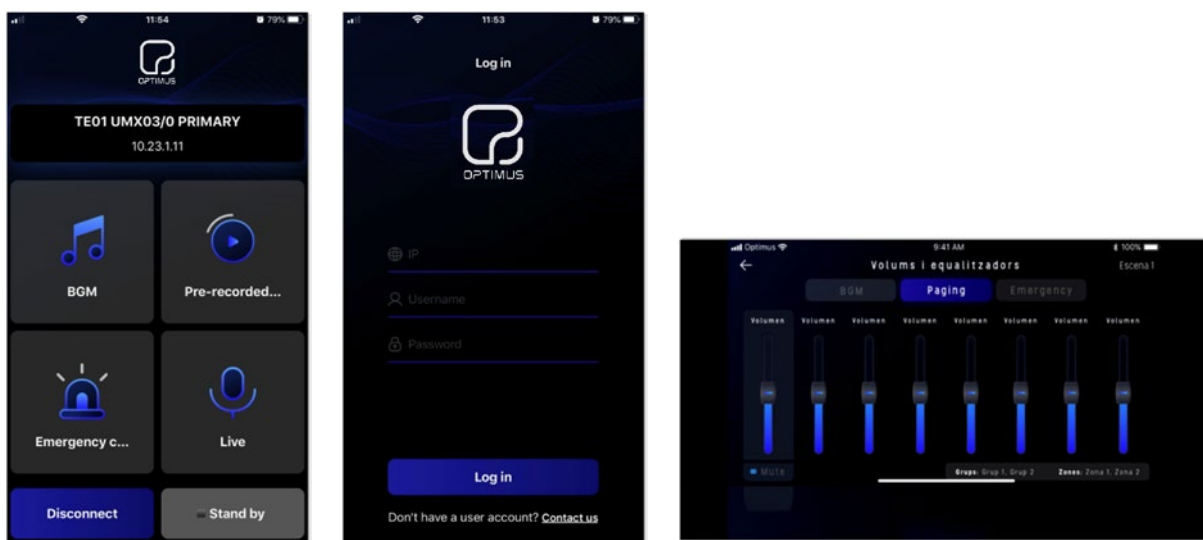


PUBLIC ADDRESS AND VOICE ALARM

Smartphone / tablet application

APP-OPT1

Application (Android and iOS) to manage COMPACT and OPTIMAX2 Public Address and Voice Alarm systems. It connects directly to equipment without intermediate servers. Suitable to control the music, announcements and system status in hotels, shopping centers, transport stations...



Compact SYSTEM

