



OPTIMUS
SOUND INNOVATION

Catalogue

PUBLIC ADDRESS & INTERCOMMUNICATION

www.optimusaudio.com



Security



Paging



Information



Communication



Music



OPTIMUS, a reference company in sound and communication, provides its customers with the extensive experience it has acquired since its creation in 1933.

OPTIMUS is now the leader in PA systems design and supplies with an extensive commercial network throughout the country and projects implemented in 81 countries on the 5 continents.

OPTIMUS offers engineering offices & prescriptors, wholesalers, installers and end-users a large team of professionals to advise them in all phases of the work.

From project preparation and site assistance to training courses for the end-user, our customers are accompanied by our experts in sound and intercommunication at all times.

The large OPTIMUS product range resolves the sound needs of large complexes such as airports or railway station networks, but also small facilities like schools, petrol stations and restaurants. Hotels, gymnasiums, sports halls, office buildings, hospitals, industries, etc.; countless projects whose needs are met by our sound systems.

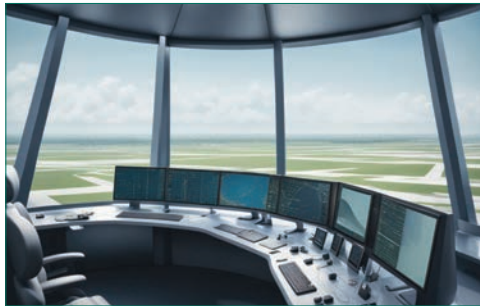
OPTIMUS, the best solution in PA systems, distributed sound and intercommunication.



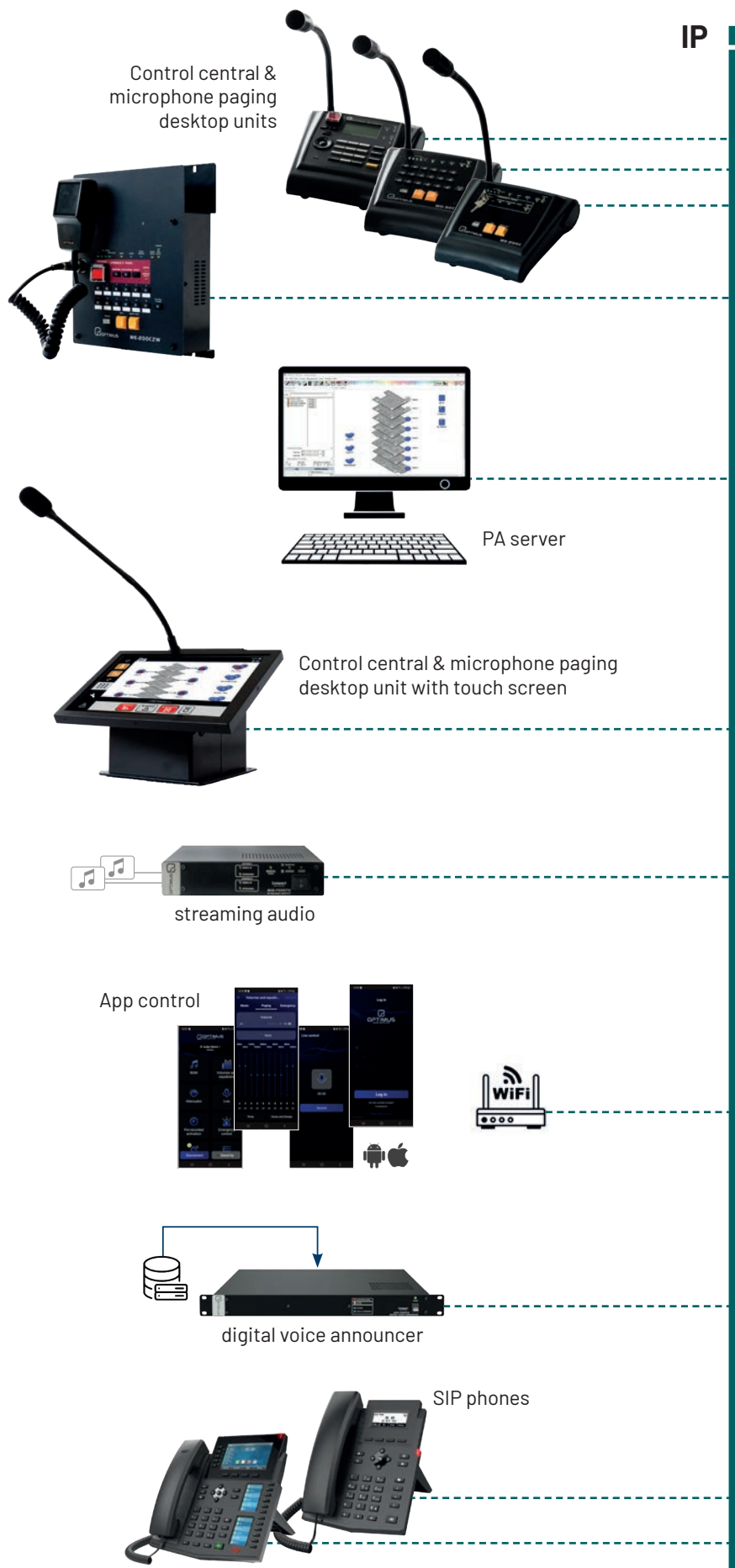
Thanks to our on-going commitment to product quality and innovation, we reserve the right at all times to suspend or change the technical features, designs, configuration, model and units without notice.

*Models with limited stock or with last units available.

CONTROL SYSTEMS	
COMPACT series	6
OPTIMAX3 series	18
NOVA series	20
AUDIO PROCESSING	
Audio matrices	22
Preamplifiers	23
Interfaces	26
Messages manager	27
Musical sources	28
AMPLIFICATION	
Amplifiers	29
Power units	32
LOUDSPEAKERS	
Attenuators	36
Horn speakers	37
Special speakers	41
Sound projectors	42
Ceiling speakers	45
Two-way ceiling speakers	50
Two-way speakers	52
Acoustic columns	56
MICROPHONES	
Desk microphones	57
Microphones	59
Wireless microphones	60
DISTRIBUTED AUDIO	61
PA RACKS	64
INTERCOMMUNICATION	
SIP intercom	65
SIP nurse call system	68
Wireless nurse call system	72
SMC system - hospitals	73
SMC system - industry	77
Signaling for accessible baths	78
Point-to-point 6 W intercom	79
Counter intercom	80



GLOBAL OVERVIEW OF OUR SOLUTIONS IN PUBLIC ADDRESS, VOICE ALARM AND INTERCOM



IP

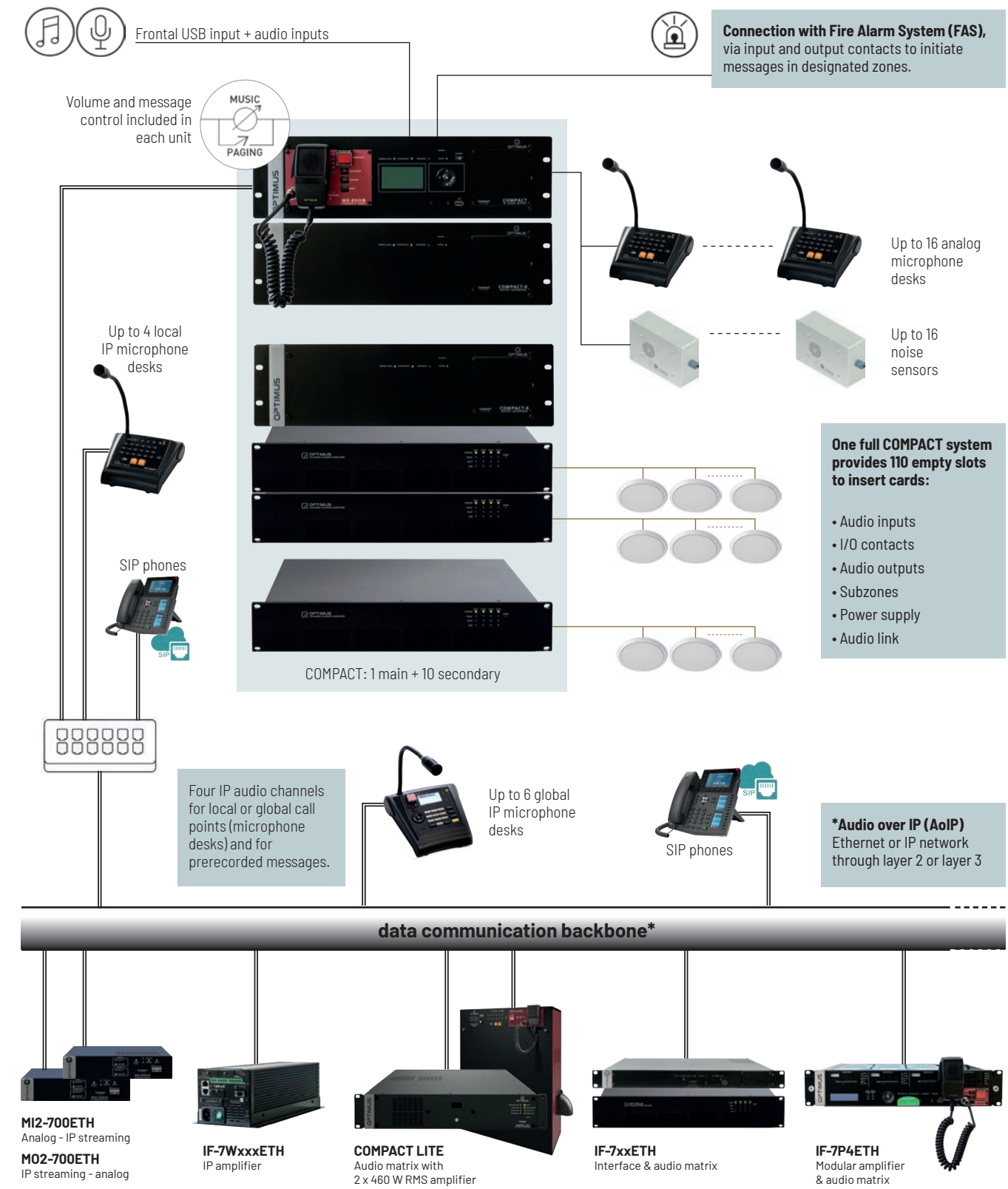


IP



COMPACT SERIES

Public address and voice alarm system, scalable and modular, EN 54 certified, suitable for both centralized and distributed installations, with the possibility of autonomous operation or linked through the corporate data network.



» Up to 20 main units COMPACT/IF accesible from IP global control points

COMPACT SERIES

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.



Imagen de COMPACT con ME-200B

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

Audio matrix 2 x 460 W RMS 8 zones. Rack | Wall

COMPACT LITE

Public Address and Voice Evacuation System for controlling up to 8 zones of speakers, with control over external attenuators, featuring a matrix of 4 analog audio inputs, 12 configurable input contacts, 6 output contacts, and two powerful Class D amplifiers providing 460 W RMS for music/backup and announcements. The system offers extensive monitoring capabilities for speaker lines, amplifiers, input contacts, and pre-recorded messages to meet EN54 requirements.



It has 10 MB of internal storage, expandable via µSD card, battery charger/manager for both internal LFP batteries in the device and external lead-acid batteries, redundant Ethernet connection, 4 IP input channels, and CAN bus communication for microphone consoles and noise sensors. It can operate autonomously or as an additional unit within a COMPACT system. Furthermore, it seamlessly integrates with external systems via VoIP and direct protocols such as JSON or API/DLL. Control and monitoring are optimized through software, TELNET, SSH functions, SNMP, and a dedicated mobile application.

COMPACT LITE WALL

The COMPACT LITE can be rack-mounted in a 19" rack or wall-mounted in a cabinet. Optionally, on the exterior of the cabinet, an emergency local microphone console with 12 keys for zones/pre-recorded messages can be installed, providing everything needed to control the public address and voice alarm system from a single unit.



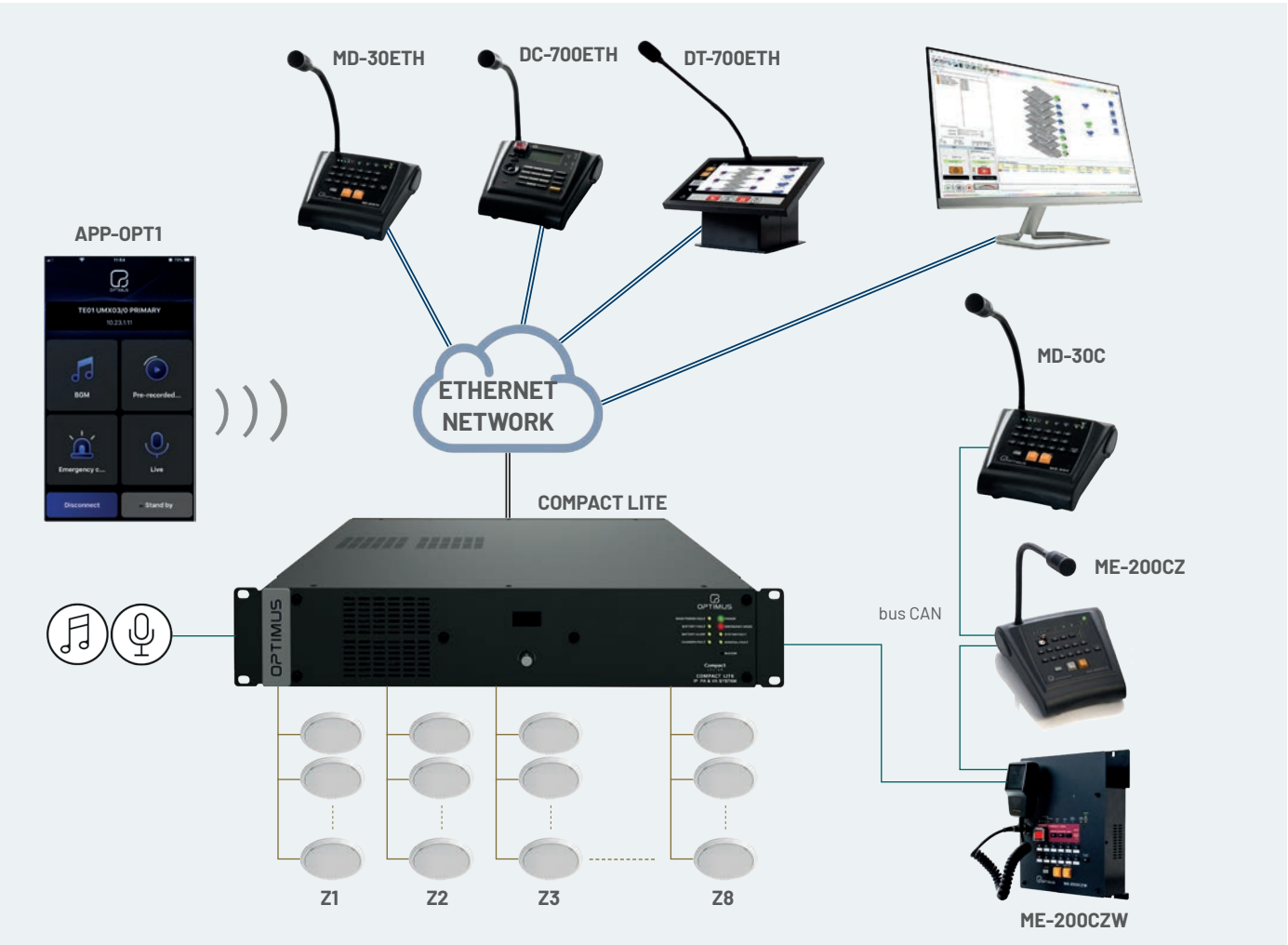
The COMPACT LITE WALL image includes the front microphone panel, sold separately.

COMPACT SERIES

Power supply	100 ~ 240 V AC Consumption Stand-by: 20W; Full load: 550 W.
Frequency response	100 ~ 18,000Hz
Signal-to-noise ratio	> 75 dB
Ethernet communication	2 Ethernet connections (RJ45) A and B for installations with redundancy.
CAN bus	Communication speed 500 kbit/s or 33.3 kbit/s, configurable by software.
VoIP	RFC3261 SIP protocol. G711 (PCMA and PCMU), G722 and L16 encoding.
Amplifiers	2 x 460 W RMS*, class D, for music/backup and announcements
Speaker line outputs	8 x 100 V. Maximum total power 460 W.
Audio inputs	4 software-configurable sensitivity inputs (-20 dB / 0 dB).
Input contacts	12 input contacts. NC/NO configurable. Supervised.
Output contacts	6 output contacts. NC/NO configurable. 1 FAIL relay.
Battery charger	Integrated, 1.5 amps
Finishes	Iron and aluminium, painted black RAL9005.
Dimensions (mm)	482.6 (width) x 88.6 (height) x 430 (depth)
19" rack units	2
Weight (without battery)	10 kg

*** The 460 W are measured by emitting a 1KHz tone for more than 1 hour, constantly and without interruptions.**

The RMS value is the only one that allows for accurate determination of how many speakers can be connected to an amplifier operating at maximum power and continuously. This calculation is not possible with other types of power ratings (burst, EN 54, musical, program, PMPO, peak...), some of which are much higher and refer to maximum values for very short periods of time before speaker failure or amplifier limitation.



COMPACT SERIES

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

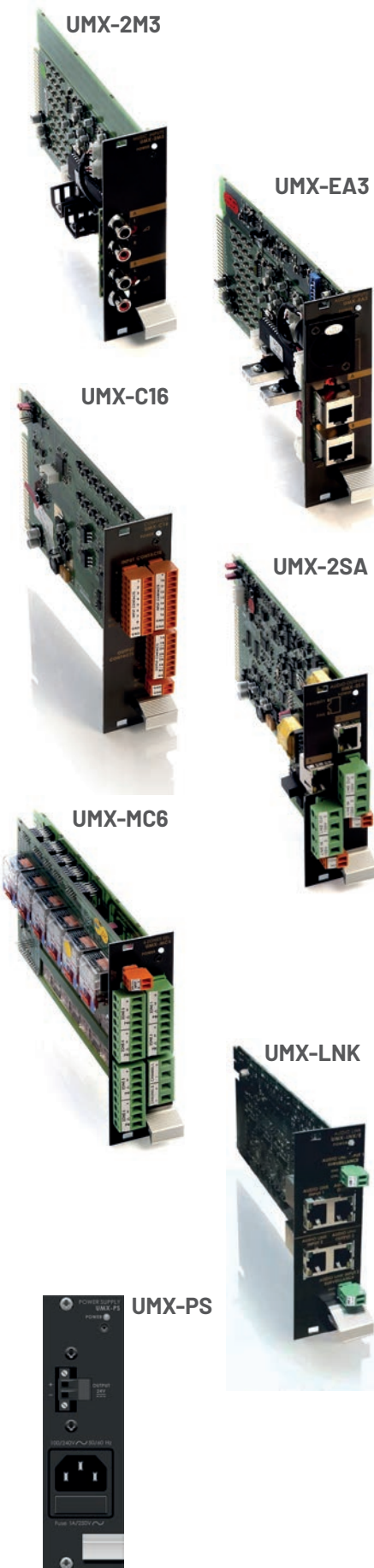
- Security paging (compatible with 3 or 4 wire attenuators).
- Double 100 V input: channel I (music) and channel II (warnings and / or backup).

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.



COMPACT SERIES

Interface - audio matrix with IP connection

IF-702ETH » 2 outputs

IF-704ETH » 4 outputs

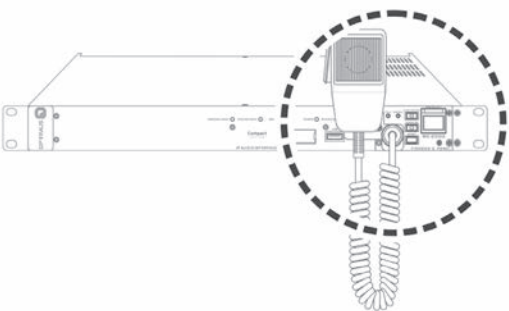
IF-722ETH » 2 inputs & 2 outputs

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.



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

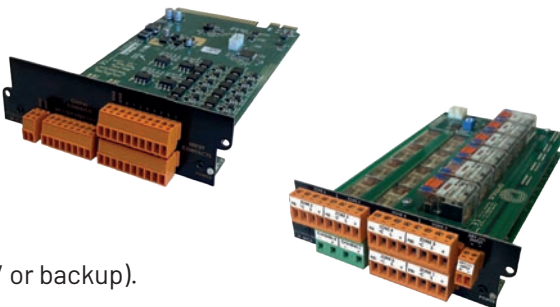
Insertable cards in IF-702ETH

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 SERIES

Modular IP Amplifier

IF-7P4ETH/0 » main
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.



IF-7P4ETH/0
with ME-200D

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.

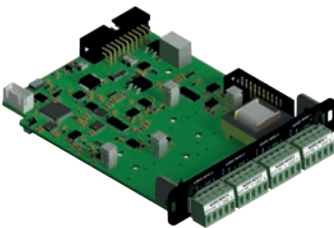
ME-200D

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

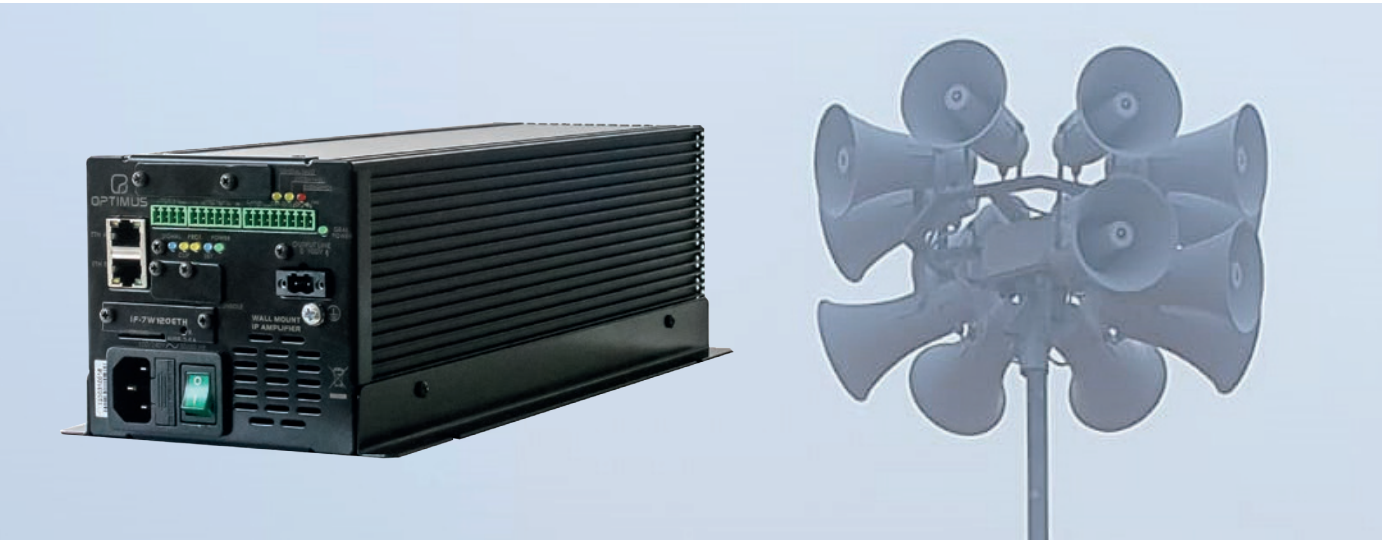
MP-60WDC | 60 W
MP-120WDC | 120 W
MP-150WDC | 150 W
MP-250WDC | 250 W
MP-300WDC | 300 W
MP-460WDC | 460 W



COMPACT SERIES

Amplificador IP

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

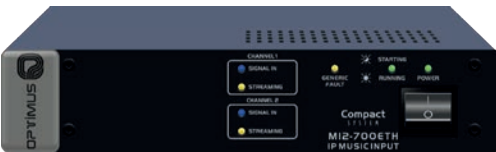
Power supply 90 ~ 240 V AC / 24 V DC

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.



M02-700ETH » 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 SERIES

Microphone stations

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.



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.



COMPACT SERIES

Microphone desks

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

Desk microphone 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.

The models ME-200CZ (desktop) & ME-200CZW (wall mounted) also incorporate 12 configurable keys for sending messages to individual zones, groups of zones or activation of pre-recorded messages.



MD-30C

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

MD-30ETH

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



MD-30KE

18-key extension module.



Noise sensor

NS-CAN

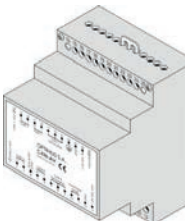
Noise sensor for bus connection to a COMPACT system (up to 16 units).



Speed adapter

CAN-AV

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



COMPACT SERIES

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 » up to 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

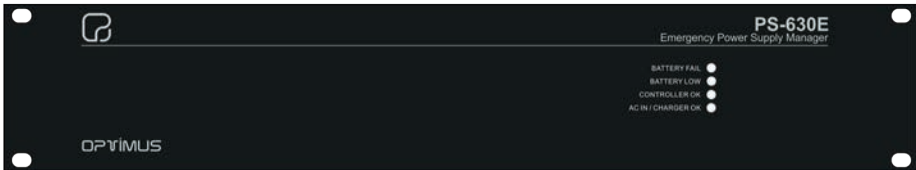


COMPACT SERIES

Emergency power supply

PS-630E

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. 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

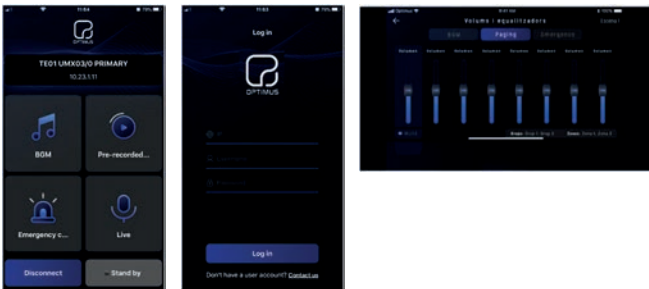
ME-F30SMP

Microphone with flexible gooseneck for broadcasting of announcements.



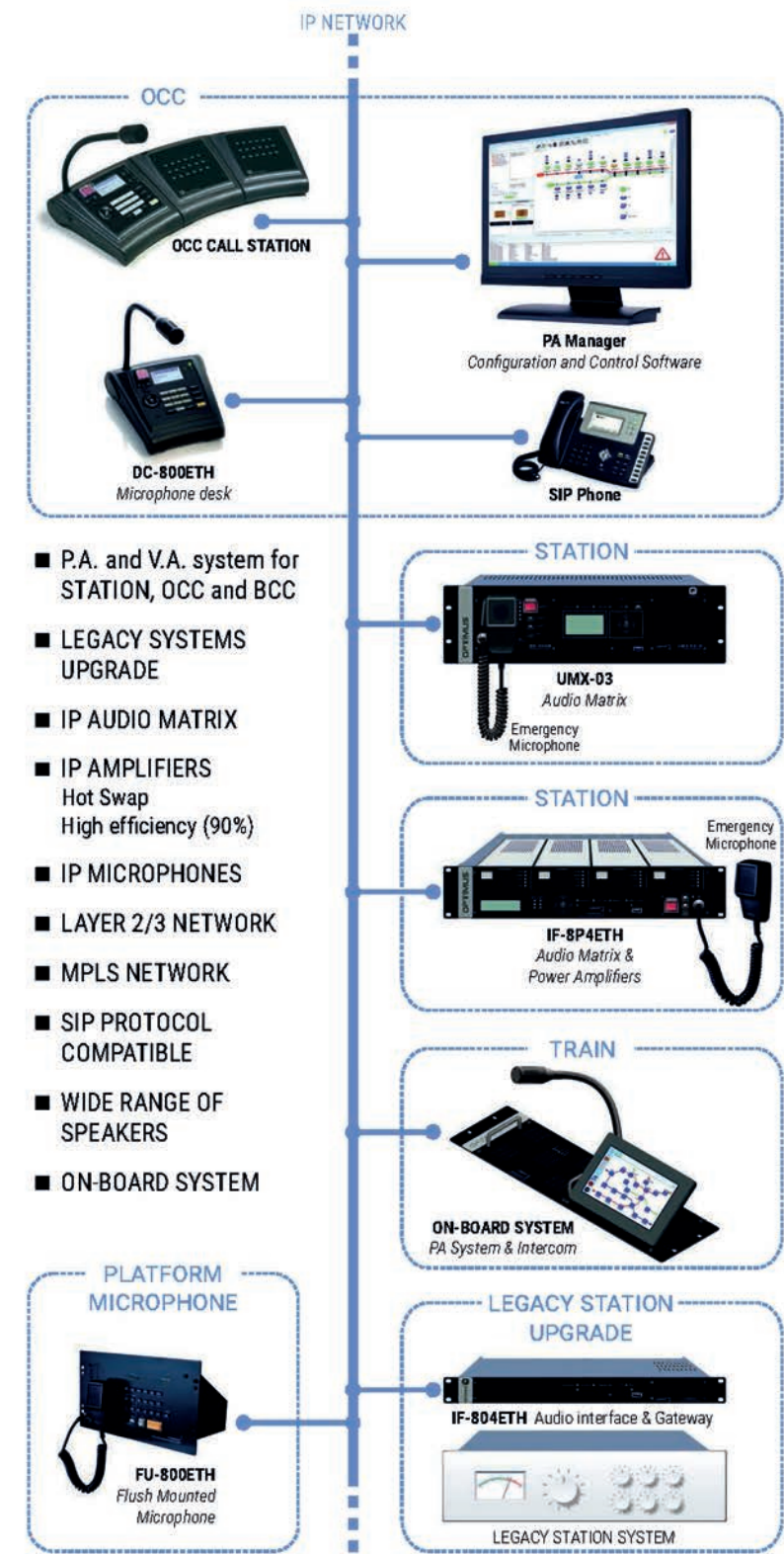
APP-OPT1 | Smartphone / tablet application

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...



OPTIMAX3 PLATFORM

OPTIMUS provide a wide range of IP sound products that are mainly designed to comply with the Railway's industry requirement as well as customized products (hardware & software) to achieve specific demands and integrations with other services.



In the Optimax3 platform we have implemented all the experience achieved in the most restrictive MRT/ LRT and Railways installations done in the last 30 years.

Using Optimax3 platform we can project a completely new PA solution and/or convert a legacy existing system into a new IP based technology system.

As specialist in Public Address & Voice Alarm Systems, OPTIMUS aim is to provide a service with specific and tailor-made solutions.

Optimax3 System is suitable for both centralized or distributed systems, scalable and modular, for infrastructures of any type and size, linked through the corporate data network.

Its flexibility, scalability and integration capability allows it to adapt or create new hardware and/or develop customized software to meets the needs of the installation.

OPTIMAX3 PLATFORM

The OPTIMAX3 platform uses its own hardware and software, as well as some standard elements of the COMPACT system (s others, cards, microphone desks and power units)... A specialized department of OPTIMUS works to adapt or create new hardware and/or develop customized software.

OPTIMAX3 main equipment

➔ UMX-03/0 • UMX-03/0E

Main unit of the OPTIMAX3 system, with redundant connection to IP, reception and emission of 4 simultaneous IP audio channels and internal bus of 16 audio channels. It can be expanded with secondary UMX-03 matrices.

OPTIMAX3 uses the same cards as the COMPACT control unit (see in the corresponding section), and also has other specific cards to cover special demands, such as the UMX-SYL with two redundant audio outputs or the UMX-ETH+ that adds to the system an additional Ethernet connection.

➔ IF-802ETH • IF-804ETH • IF-822ETH

Interface to connect power amplifiers at any point in the network, with two audio outputs (IF-802ETH), with four audio outputs (IF-804ETH) and with two inputs and two audio outputs (IF-822ETH).

➔ IF-8P4ETH • IF-8P4/0E

Modular IP amplifier with capacity for 4 class D power modules (one for backup if necessary) of 60, 120, 150, 250, 300 and 460 W. Allows hot swapping of amplifiers.

➔ IF-8WxxxETH

Amplifiers with IP connection that receive up to 4 simultaneous IP audio channels. With warning safety relay, input and output contacts and local audio input. Available in various powers and in AC or AC/DC versions.

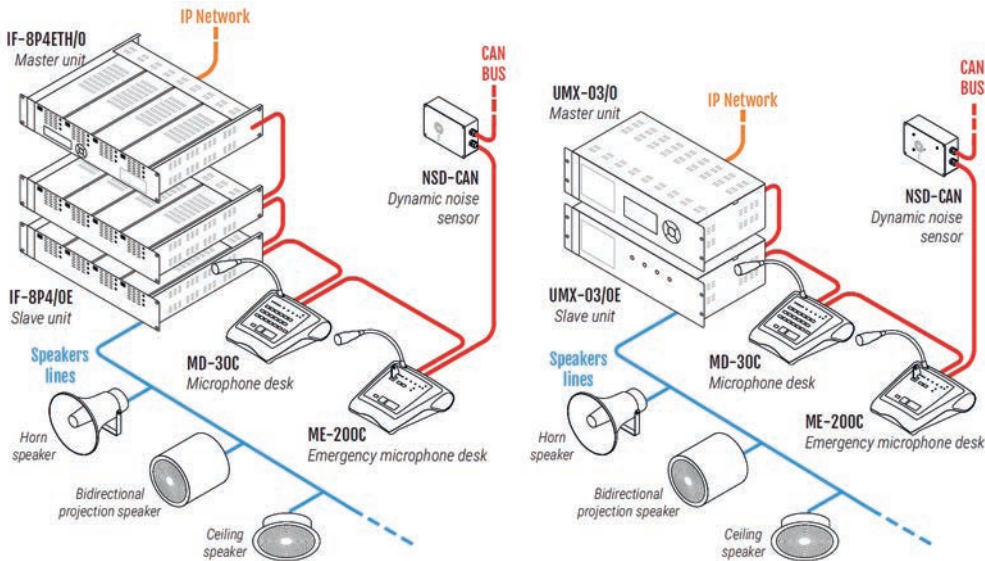
➔ MI2-800ETH • MO2-800ETH

Audio converters that convert from analog audio to OPTIMAX3 digital format (MI2-800ETH) and from OPTIMAX3 digital format to analog audio (MO2-800ETH).

➔ DC-800ETH • DC-800ETH/T • DT-800ETH

Microphone desks for the broadcast of announcements, live or pre-recorded through the Ethernet network, and for the control and supervision of the public address system and configuration of parameters.

Only part of the OPTIMAX3 platform products are shown in this catalog. Our technical & sales department is at your disposal to study your installation needs and advise you on the best solution.



NOVA SERIES

Public address and voice alarm system, designed according to EN 54, composed of 500 W RMS class D amplifiers with six loudspeakers zones selection and microphonic desks for remote control of the system.

NOVA
system

NOVA-500 » main amplifier
NOVA-500S » slave amplifier

Amplifiers of the NOVA Public Address and Voice Alarm system, with everything necessary to act in an emergency situation: pre-recorded messages, control for its activation in an emergency, handheld microphone for broadcasting live messages (in the main amplifier), connection to the alarm system...



110 ~ 240 V AC, 50/60Hz | 20 ~ 27.5 V CC
650 W

5 mV
600 Ω
6, with level adjustment on the rear panel
> 70 dB
Fail, EVAC status & programmables (8)
EVAC reset & programmables (8)
Up to 255
Aluminium plate and metal case in black
484 (width) x 132 (high) x 449 (depth) (3U rack)
11.5 kg

- Power amplifier with 500 W RMS power.
- 6-zone output, individual volume control.
- Handheld microphone (firefighters) on front panel (NOVA-500)
- Emergency mode with two pre-recorded messages: alert and evacuation (NOVA-500)
- Supervision of amplifier, speaker lines, microphone, pre-recorded messages...
- 6 audio inputs.
- 8 contact inputs and 8 contact outputs.
- AC and DC power.
- Connection for backup amplifier.
- Connection with secondary amplifiers and microphone desks, up to 600 m.

NOVA SERIES

Microphone desk

NOVA-TM » microphone desk with touch screen

Microphone desk for remote control of the NOVA-500 and NOVA-500S amplifiers. With a touch screen and the ability to send messages to speaker zones, individually or in groups, using 40 programmable keys. Allows control of music program with input selection and music assignment by zone. The equipment includes two RJ-45 connectors, facilitates loop installation to avoid possible disconnection errors, and monitors system status.

Control	up to 40 programmable keys
Communication distance	up to 600 m
Power supply	24 V DC / Phantom
Audio input	
line	350 mV / 10 kΩ
microphone	5 mV / 600 Ω
Dimensions (mm)	256 (width) x 149 (depth)
Weight	1.5 kg
Finish	Aluminium, black colour



NOVA-12RM » microphone desk with 12 keys

Microphone desk for remote control of the NOVA500 and NOVA500S amplifiers. It has 12 programmable keys for zone selection, music, messages ... and a selection key for all zones. Distance to the amplifier up to 600 m, with the possibility of redundant connection. It has volume adjustment, external mic / line input, possibility of PTT (push-to-talk) operation...

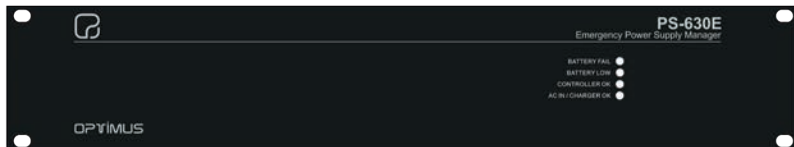
Control	12 programmable keys
Communication distance	up to 600 m
Power supply	phantom 20 ~ 27.5 V
Audio input	
line	775 mV / 10 kΩ
microphone	5 mV / 600 Ω
Dimensions (mm)	240 (width) x 140 (depth)
Weight	1 kg
Finish	Aluminium, black colour



Emergency power supply

PS-630E

The manager allows the permanent emergency power supply in accordance with EN 54-4, in the event of a power failure. The 19" unit (2U) is equipped with 6 fused outputs that can be used with up to 30 A load. The smart battery condition monitoring ensures an uninterrupted 24 V DC power supply and the recharging of the battery immediately after the restoration of the mains supply. Due to the "hot swap" technology the exchange of the batteries can be done without service interruption.



PREAMPLIFICATION

Audio matrix with DSP

MXD-88

Audio matrix with 8 inputs/8 outputs and DSP, with control from remote panels or from an app, available for Android and IOS, configurable and customizable. Inputs can be mic or line, with various selectable gain settings and phantom power capability. The sampling frequency is 48 kHz and the signals are encoded with 24 bits.

Digital Signal Processor (DSP) includes multiple functions such as Expander, Compressor, Limiter, Automatic Gain Control (AGC), Equalizer, Feedback Suppressor, Automixer, Echo Canceller, Noise Suppressor, Audio Matrix, Filters, Delays ... It also has a sound card via USB and complete software to configure all the parameters.

Processor	ADI SHARC 21489
Sampling rate	48 KHZ / 24 bit
Input Gain	0/6/12/18/24/30/36/42/48 dBu
Input Level	0/-6 dB
Phantom Power	48 V
Frequency Response	20 ~ 20 kHz ±0,2 dB
Maximum Level	+24 dBu
THD + Noise	0,003% @ 4 dBu
Dynamic Range	110 dB (balanced connection)
Background Noise (A-weighted)	-91 dB (balanced connection)
Common Mode Rejection Ratio	@60Hz 80 dB
Channel Isolation @ 1KHz	108 dB
Input Impedance	9.4 kΩ
Output Impedance	102 Ω
System Delay	< 3 ms
Communication	Ethernet
Control protocols	RS232 and RS485
GPIO	4 input/output contacts
Additional features	USB sound card
Power supply	220 V AC / 50 Hz-60 Hz
Consumption	< 40 W
Dimensions (mm)	482 x 260 x 45
Weight	3 Kg

Configuration and control program



Zone microphone desk

PMX-8Z

Microphone desk with keys for zone selection (8), talk key (TALK) and gong ON/OFF. Volume control for microphone and gong, RS485 + audio connection with MXD-88.



Remote controls

WPD-8P

Remote control panel (Ethernet) with 8 keys and a rotary knob. Each key has assigned a function from the configuration program: volume adjustment (using the rotary knob), scene selection, muting an input/output (mute), executing a command...



WPD-SC

Remote control panel (Ethernet) with display and a rotary knob to control settings, adjust volume, scene selection, mute an input/output, execute a command...



PREAMPLIFICATION

Preamplifier

PM-82S

Audio preamplifier with 8 balanced inputs, 2 for microphone signals and 6 for stereo line signals, all with gain controls. The two microphone inputs feature 3-band equalizers (highs, mids, and lows), phantom power, and priority over other inputs.

The unit includes two additional inputs, one for PM-2Z microphone desks, with priority over all inputs, and another for 0 dB signals with absolute priority, for combining with pre-recorded messages players or external voice alarm systems, for example.

The preamplifier has two balanced 0 dB stereo outputs for direct connection to amplifiers and power units. From the front panel, it is possible to assign each input to one of the two outputs, adjust the audio level of each input and output, and equalize (highs and lows) each output.



Power supply	100 ~ 240 V AC 50/60 Hz
Audio inputs	2 x MIC (CH1-2): -50 dB ~ -6 dB / 20 kΩ, balanced (mono) 6 x LINE (CH1-8): -20 dB ~ +4 dB / 20 kΩ, balanced (stereo) 1 x 0 dB with absolute priority 1 x remote microphone desks PM-2Z
Audio outputs	2 x 0 dB / 600 Ω, balanced
Frequency response	20 Hz ~ 20 kHz
Harmonic Distortion (THD)	<0.1 %
Signal-to-noise ratio	>90 dB
Equalization	MIC inputs - high: 12 kHz med: 2.5 kHz low: 80 Hz Outputs - high 10 kHz low: 100 Hz
Weight	3.33 Kg
Dimensions	482 x 44 x 320 mm (1 u. rack)
Finish	Black metal RAL 9005

Microphone desk

PM-2Z

Microphone desk with keys for zone selection, general call, and talk. It has volume control for audio level and gong.

Up to four units can be connected to the amplifier using the LINK connection of each unit (UTP cat5 or higher cable, RJ45 connectors) at a distance of up to 200 meters.



PREAMPLIFICATION

Mixer preamplifier with 6 inputs and sound source

*PM-61M

Simple but versatile preamplifier, offering a multi-functional solution for installations where multiple voice and music sources need to be mixed to one output zones. The design with six balanced inputs allows connecting any type of audio source. The first two channels are for microphone and line level audio sources, with 3-band tone control, phantom power and talk over for priority announcements. Four more channels are prepared to connect line level audio sources. The audio output is also balanced.

Output	0 dB, 600 ohm, balanced
Inputs MIC/LINE (x2)	-50 dB ~ -6 dB, 20 kΩ, balanced
Inputs LINE (x4)	-20 dB ~ +4 dB, 20 kΩ, balanced
Frequency response	20 ~ 20,000 Hz
THD	< 0.01 %
Crosstalk	> 70 dB
Equalization input	high: 12 kHz ±15 dB mid: 2,5 kHz ±15 dB low: 80 Hz ±15 dB
Equalization output	high : 10 kHz ±15 dB low : 100 Hz ±15 dB
Power source	100 ~ 240 V AC, 50/60 Hz, 24 V DC
Weight	3.4 kg
Dimensions	482 x 44 x 320 (1 u rack)



12 channel mixing table

MX-12FX » 8 x mono MIC/LINE + 2 x stereo

Mixing console with 8 configurable MIC / LINE mono inputs and 2 stereo inputs (12 channels in total). Each input has sensitivity adjustment, volume adjustment, three-band equalization, send to the auxiliary output with pre and post-fader ... The console includes a 24-bit digital effects processor, 7-band graphic equalizer, adjustment gain per output channel, MP3 player/recorder with USB and Bluetooth, among other features.



- 8 mono inputs + 2 stereo inputs.
- 3-band equalizer per input.
- Individual phantom power.
- General and per-channel level adjustments.
- Send to auxiliary with pre/post fader, per channel.
- 60mm dust protected faders.
- Additional audio outputs for headphones and supervision.
- Output level led indicators, one per channel.
- Symmetrical XLR outputs.
- Mic or line input preamps.
- 7-band graphic equalizer.
- 24-bit DSP effects processor.
- MP3 player/recorder.

PREAMPLIFICATION

Wall preamplifiers

PM-4E » flush · PM-4P » surface

Preamplifier and mixer of small size, flush-mounted (PM-4E) or surface-mounted (PM-4P) in wall. With two microphone inputs and two auxiliary inputs, individual volume control and mixed output 0 dB. Suitable for facilitating decentralized connection of sound sources in halls, meeting rooms, classrooms...



- 2 x MIC inputs, balanced XLR + 2 x AUX inputs, RCA, stereo
- 0 dB output, balanced, 600 Ω
- Phantom, selectable MIC1/2
- Flush-mounted version **PM-4E**, dimensions 220 x 164 x 9 mm
- Surface-mounted version **PM-4P**, dimensions 223 x 167 x 59 mm
- Power supply 230 V AC / 24 V DC



PM-4P



PM-4E

PM-2EU » standard box

Preamplifier and mixer of small size, flush-mounted (universal box) with microphone input and auxiliary input, individual volume control and mixed output 0 dB. Suitable for facilitating decentralized connection of sound sources in halls, meeting rooms, classrooms...



- Microphone input -40 dB & Auxiliar input 0 dB
- 0 dB output, balanced
- Up to 150 m with FTP CAT5 cable
- Phantom, 24 V
- Finished in white aluminium
- Dimensions 84 x 84 x 33 mm
- Flush-mounted in standard box
- Power supply 24 V DC

Feedback suppressor with DSP

LS-320

Digital acoustic feedback (larsen effect) suppressor, with two channels of 24 bits. Automatically locates the feedback frequencies and eliminates them with notch filters. The filters only eliminate the problematic frequencies and faithfully maintain the quality of the audio signal. Amongst other things the LS-320 has 24 manually or automatically adjustable programmable parametric filters and 10 programs to adapt to different environments.

Power supply	230 Vac, 50/60 Hz, 10 W
Frequency response	20 ~ 20,000 Hz
Noise	98 dB
Distortion (THD)	0.0065% (4 dB, 1 kHz)
Diaphony	-95 dB
MIDI	DIN 5P (IN/OUT/THRU)
Digital processor	24 bits sigma-delta
Dimensions (mm)	45 x 482 x 152 (1 u)
Weight	3 Kg
Finish	skinplate, black



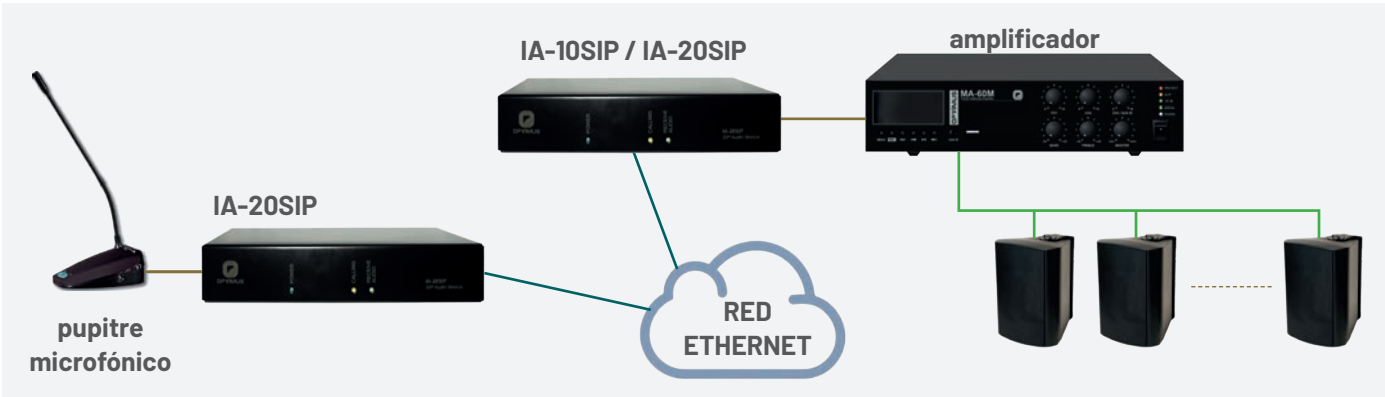
INTERFACES

SIP Interface

- IA-10SIP » SIP → analog audio
- IA-20SIP » SIP ↔ analog audio

IP/SIP audio interfaces to analog audio. They allow to transmit audio from any SIP device to an analog public address system: amplifier, preamplifier, power unit... The model IA-20SIP is bidirectional, it also allows to connect an analog audio source (microphone, musical source ...) and transmit the signal to SIP devices.

- Parameter configuration via WEB server.
- Local power supply 5 Vdc (I905SIP) oPoE.
- Direct audio output for loudspeaker (8 Ohm, 2 W).
- AUX audio outputs (0 dB) and MIC (-60 dB).
- Relay contact output (activation by DMTF).
- Open collector priority output (activated in connection).
- Indicators: power supply, call and audio level.
- **IA-20SIP only**
- Audio input with selectable level, AUX/MIC.
- Input contact for call (intercommunication) or priority (PA).
- Operating mode: broadcaster, receiver or bidirectional.



IA-24SIP » SIP → analog audio

IP/SIP audio to analog audio interface. Stream audio from any SIP device to analog PA equipment: amplifier, preamplifier, power amp... HTTP/JSON integration.

Telephone - Public Address interface

IT-100

Allows access to PA systems from an analogue telephone line (external or switchboard). The configurable audio output allows connection to any PA equipment. Amongst other functions, the unit includes access key, conversation limit and noise door.



Input	analogue telephone line
Audio output	configurable (-60, -20, 0 and +4 dB), RJ45
Priority	announcement security contact and relay output
Volume control	in rear and front panel (disconnectable)
Power supply	230 Vac, 50 - 60 Hz
Consumption	4.6 W
Weight	1.6 Kg
Dimensions (mm)	213 x 44 x 235
Finish	RAL 9005 black metal

SOUND SOURCES

Messages manager with zones & time programming

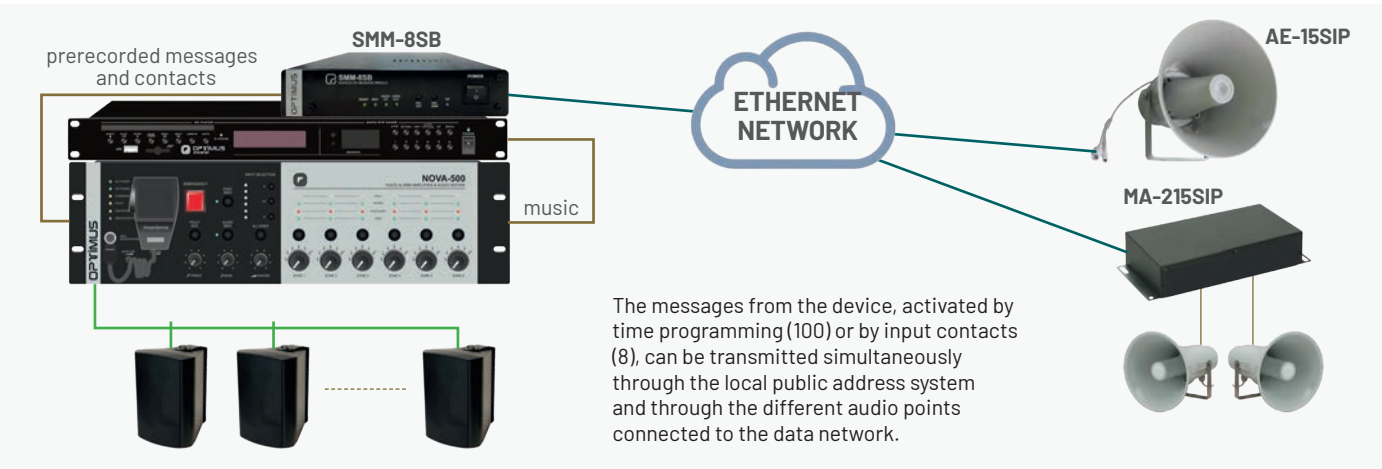
SMM-8SB

Management system for sending sequences of pre-recorded audio messages with time programming and control of loudspeaker zones. In addition to the analog audio output, the device has an Ethernet port for sending the signal via IP multicast to compatible devices. It incorporates input and output contacts, and an audio input for local or streaming music broadcast. Easily integrated in any public address system, new installation or already in operation.

- Management of up to 100 hourly programmations to send prerecorded messages.
- Each message can combine up to 3 different audio files (WAV, OGG, MP3).
- Audio output (0 / -60 dB) with priority by relay and front panel volume control.
- Audio streaming (multicast) to OPTIMUS SIP equipment: speakers, amplifiers or audio interfaces.
- 0 dB audio input for local music broadcast or streaming (multicast).
- Up to 8 zone management through open collector outputs.
- Advanced time programming, start and end, time of launch, frequency, repetition and exceptions (holidays).
- 8 specific input contacts for messages and an additional one configurable as a message or ACK.
- Programming from computer via Ethernet connection and integrated WebServer. Stand-alone operation without computer.



Power supply	115 - 230 V AC 50/60 Hz / 24 V DC
Consumption (max)	40 mA máx
Frequency response	50 Hz - 15 kHz ± 3 dB
Memory capacity	8 GB
Audio files formats	MP3, WAV, OGG
Sampling frequency	0 dB, 775 mV
Audio level	MIC: -60 dB, 1 mV
	AUX: 0 dB, 775 mV
Weight	1.75 Kg
Dimensions	213.5 x 44 x 235 mm (1 u rack)
Finished	metal, black colour RAL 9005



The messages from the device, activated by time programming (100) or by input contacts (8), can be transmitted simultaneously through the local public address system and through the different audio points connected to the data network.

Queue manager with audio and video output

SMM-8QM

Queue management module with eight input contacts, each of one activates an audio and a video output. The audio output plays a message stored in the equipment and the video output is background image with a text definable in the software itself. Suitable for managing cashiers in a supermarket or store, to indicate to the first person in line which cashier to go to, with the audio message reproduced via loudspeakers and with the image indicating the cashier number displayed on a monitor.



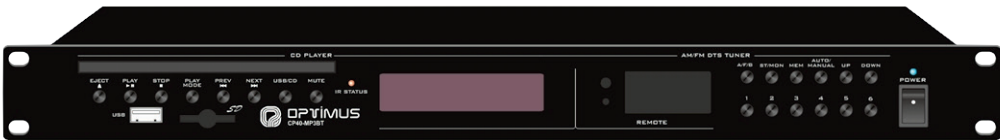
SOUND SOURCES

Player and AM/FM tuner

CP40-MP3BT » CD/MP3 · USB/SD · AM/FM · Bluetooth

A musical source with AM-FM tuner, compact disc player (audio CD/MP3), Bluetooth, SD card and USB memory reader. Remote control. The unit has independent output for each musical source, with audio level adjustment.

- Tabletop or rack mount (1 height unit)
- CD player
- MP3 player (frontal USB / SD)
- AM/FM tuner
- Remote control
- Two stereo outputs: CD/MP3 and AM/FM
- Bluetooth
- Volume adjustment from remote control



Player

CP30-MP3 » CD/MP3 · USB/SD

A musical source with compact disc player (audio CD/MP3), SD card and USB memory reader. Remote control and monitor speaker with volume regulation.

- Tabletop or rack mount (1 height unit)
- CD player
- MP3 player (frontal USB / SD)
- Remote control
- Stereo output



Music source in DIN rail

C500-BGM » MP3 · USB/SD · FM · Bluetooth

Music source with FM radio tuner and MP3 file player via SD card reader and/or USB memory. Bluetooth connection and remote control. DIN rail format.



AMPLIFIERS

Amplifier with 5 microphone inputs

AXF-240 » 240 W

Amplifier for 100 V line (also 70 V and 4 Ω) with 240 W RMS. It has five inputs for microphones, as well as two auxiliary inputs and one emergency input with maximum priority.



RMS power	240 W
Outputs	speakers: 100 V, 70 V and 4 Ω PRE out & AMP in (0 dB) / Line out (0 dB)
Inputs	MIC 1 ~ 5 (-50 dB) / AUX 1 ~ 2 (-6 dB) / EMG (0 dB)
Frequency response	55 ~ 18,000 Hz (MIC) / 55 ~ 20,000 Hz (AUX)
S/N Ratio	> 80 dB
THD	< 1 %
Cooling	silent fan
Power supply	115 ~ 230 V CA / 50 ~ 60 Hz
Weight	11 kg
Dimensions (mm)	420 x 88 x 320

Amplifiers with sound source

*MA-30M » 30 W – MA-60M » 60 W – MA-120M » 120 W

Desktop amplifier for 100 V line (also 70 V and 4 Ω). They include an internal music source with MP3 via USB and Bluetooth, two MIC/LINE inputs with phantom power (the first with VOX priority), a LINE input and a microSD card for pre-recorded messages with activation by contact input.



	MA-30M	MA-60M	MA-120M
Rated Power Output	30 W	60 W	120 W
Speaker Outputs	100 V, 70 and 4 Ω	100 V, 70 and 4 Ω	100 V, 70 V and 4 Ω
Inputs	CH1 y CH2: MIC (-50 dB) / LINE (-6 dB) CH3: LINE (-6 dB)	CH1 y CH2: MIC (-50 dB) / LINE (-6 dB) CH3: LINE (-6 dB)	CH1 y CH2: MIC (-50 dB) / LINE (-6 dB) CH3: LINE (-6 dB)
Frequency Response	80 ~ 18,000 Hz	80 ~ 18,000 Hz	80 ~ 18,000 Hz
S/N Ratio	> 70 dB	> 70 dB	> 70 dB
THD	< 1.0 %	< 1.0 %	< 1.0 %
Cooling	convection cooled	convection cooled	convection cooled
Power Supply	110 ~ 240 V AC / 50 ~ 60 Hz	110 ~ 240 V AC / 50 ~ 60 Hz	110 ~ 240 V CA / 50 ~ 60 Hz
Consumption (Idle/Maximum)	3 W / 45 W	3 W / 85 W	4.5 W / 165 W
Weight	3.2 kg	3.5 kg	3.3 kg
Dimensions (mm)	270 x 60 x 190	270 x 60 x 190	270 x 60 x 190

AMPLIFIERS

6-zone compact amplifier with music source

MAV-120Z6 » 120 W – MAV-240Z6 » 240 W – MAV-500Z6 » 500 W

Amplifiers with 6 x 100 V speaker outputs with independent volume. They incorporate six general audio inputs, one emergency input and one input for microphone desks with zone control. They have a music source with MP3 via UBS and SD, FM radio and Bluetooth. Include clip, short circuit, overload and high-temperature protection, and LED indicators for power, signal, peak and protection.



	MAV-120Z6	MAV-240Z6	MAV-500Z6
Power Output (RMS)	120 W	240 W	500 W
Speaker Outputs	100 V, 6 zones	100 V, 6 zones	100 V, 6 zones
Inputs	mic 1 ~ 4: 2.5 mV line 2 ~ 6: 250 mV EMC: 250 mV	mic 1 ~ 4: 2.5 mV line 2 ~ 6: 250 mV EMC: 250 mV	mic 1 ~ 4: 2.5 mV line 2 ~ 6: 250 mV EMC: 250 mV
Frequency Response	80 ~ 16.000 Hz	80 ~ 16.000 Hz	80 ~ 16.000 Hz
S/N Ratio	> 70 dB	> 70 dB	> 70 dB
THD	< 0,1 %	< 0,1 %	< 0,1 %
Cooling	internal fan	internal fan	internal fan
Indicators	power, prot, clip & signal	power, prot, clip & signal	power, prot, clip & signal
Protection	short circuit, peak, overload and high temp	short circuit, peak, overload and high temp	short circuit, peak, overload and high temp
Power Supply	110 ~ 230 Vac 50~60 Hz / 24 Vdc	110 ~ 230 Vac 50~60 Hz / 24 Vdc	110 ~ 230 Vac 50~60 Hz / 24 Vdc
Consumption	200 W	400 W	650 W
Weight	9.4 kg	11.5 kg	11.5 kg
Dimensions (mm)	438 x 405 x 88 (2 u)	438 x 405 x 88 (2 u)	438 x 405 x 88 (2 u)



Microphone desk

PMV-6Z

Microphone desk with keys for zone selection (6), general call and for talking. It has volume control and external audio input that replaces the microphone built into the 40 cm gooseneck.

A maximum of eight units can be connected to the amplifier via cat6 FTP cable and RJ45 connectors, at a distance of up to 300 meters.

AMPLIFIERS

Public Address kit

MAV-240KIT

The equipment included in this kit allows you to configure public address systems with a power of 240 W RMS, a microphone desk for sending announcements to 6 speaker zones and a pre-recorded message manager that also allows time programming. You only need to add the speakers to complete the installation.

The kit is suitable, for example, in schools to manage entries, exits and class changes, or to indicate shift changes in factories, or in shops to indicate the next closing or the day's offers...

Equipment included in the kit:

- 1x MAV-240Z6 240W Six-Zone Amplifier
- 1x SMM-8SB Message manager with time schedule
- 1x PMV-6Z Microphone desk



Pre-recorded messages with zone selection with NOVA-500

The NOVA-500 amplifier allows you to use the zone selection built into the SMM-8SB. By combining the two devices it is, therefore, possible to send pre-recorded messages at predefined times and to the desired loudspeaker zones, all configurable through the programming software.



POWER AMPLIFIERS

Mainframe for 4 x class D power modules

DA-4PM/0 » up to 4 x 460 W

Mainframe 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.

It is a high-performance power amplifier designed to work mainly in association with the COMPACT and OPTIMAX2 public address and voice alarm systems, due to its high efficiency, its robustness and the ease of replacing or adding power modules without the need to stop the operation of the equipment. For these same reasons, they are power amplifiers that can be used in any situation.



Slots for amplifier modules	4
Audio inputs	4 x 0 dB (775 mV rms)
Audio outputs	4 x independents, for speaker lines (100V)
Input contacts	4 x standby activation contact
Frequency response	20 ~ 20,000 Hz
S/N ratio	> 75 dB
Power supply	100 ~ 240 V AC / 24 V DC (only MP-WDC modules)
Front indicators	POWER, STANDBY, PROTECT, CLIP & SIGNAL
Rear Indicators	STANDBY & PRIORITY
Finish	RAL9005 iron painted black
Dimensions (mm)	482,6 x 44,4 x 430 (1 u rack)
Weight	4,0 kg (without modules)

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



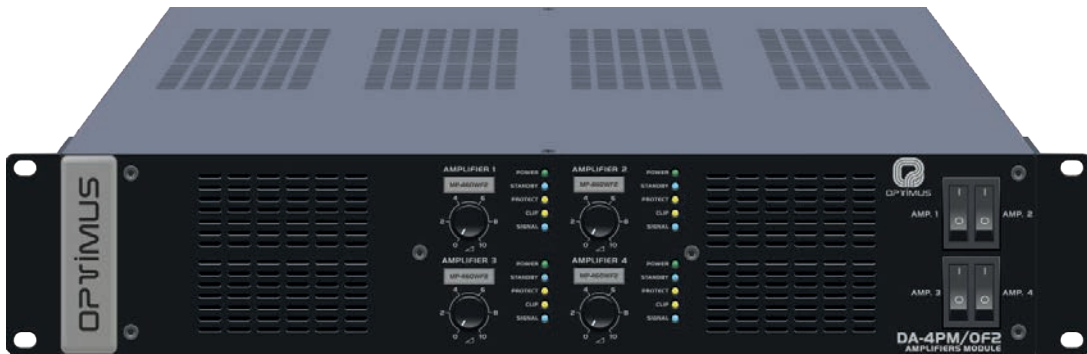
POWER AMPLIFIERS

Mainframe for 4 x class D power modules

DA-4PM/0F2 » up to 4 x 460 W

The power amplifiers from the UP8 series starts with the DA-4PM/0F2 chassis with a capacity to house up to four MPF2 series power modules, and allows the configuration of 1, 2, 3 or 4 channel power amplifiers, with power per channel from 60 W to 460 W (100 V line), perfectly adapted to the needs of the work. The ease of selecting the power modules that best suit the loudspeakers in the installation and the high efficiency of class D minimize electrical energy consumption. Also, in the case of using emergency power supplies (with AC/DC modules), the number of batteries required is reduced.

As an option, each power module can incorporate a security relay for messages and program and priority inputs with automatic switching.



Slots for amplifier modules	4
Power supply	100 ~ 240 V AC, 50 / 60 Hz (F2 & F2DC modules) 24 V DC (only F2DC modules)
Front controls	volume & ON/OFF switch for each module
Power monitoring output	17 V DC (F2 modules) or 30 V DC (F2DC modules)
Standby mode	by contact (activates STANDBY mode)
Front indicators	POWER, STANDBY, PROTECT, CLIP & SIGNAL
Rear indicators	PRIORITY & ALARM
Audio inputs	1 x RJ45 para cada módulo (0 dB)
Audio outputs	1 x regleta para cada módulo (salida de 100 V)
Finished	black metal RAL9005
Dimensions (mm)	482.6 x 88.6 x 430 (2 u rack)
Weight	6.5 kg (without modules)

RSAP-F2

Optional module with security paging relay and program input for F2 and F2DC series amplifiers.

Power modules

Power supply 100 ~ 240 V AC

- MP-60WF2 | 60 W
- MP-120WF2 | 120 W
- MP-150WF2 | 150 W
- MP-250WF2 | 250 W
- MP-300WF2 | 300 W
- MP-460WF2 | 460 W

Power supply 100 ~ 240 V AC / 24 V DC

- MP-120WF2DC | 120 W
- MP-150WF2DC | 150 W
- MP-250WF2DC | 250 W
- MP-300WF2DC | 300 W
- MP-460WF2DC | 460 W

For this equipment, 100 V / 70 V transformers and a PRO-PRI module are available for compatibility with the range of 7 series power amplifiers and earlier. Consult us if you need a replacement or expansion of your installation.

POWER AMPLIFIERS

Power amplifier

DA-240M4 » 4 x 240 W

Class D digital power unit with four independent amplifiers integrated into the same 19" rack chassis (1 u). It incorporates four balanced inputs, four speaker outputs for 100 V / 8 Ω line, independent volume control and high pass filter (HPF) for each of the inputs. It has protection circuits against peaks, short circuits, overheating and overload, and LED indicators for power, signal, peak and protection. 110 ~ 230 V AC power supply and cooling by two fans.



RMS power	4 x 240 W
Speakers output	100 V / 8 Ω
Input	775 mV / 0 dB 10 kΩ
Frequency response	L/H Cut OFF: 20 Hz ~ 20 kHz (+1 / -2 dB) L/H Cut ON: 70 Hz ~ 10 kHz (+1 / -3 dB)
S/N ratio	> 80 dB
THD	< 0.1 % (1 kHz / -3 dBv, 100 W)
Cooling	two internal fans
Indicators	power, protection, clip & signal
Protection	peak, short-circuit, overload & high temperature
Power supply	110 ~ 230 V AC 50 ~ 60 Hz
Consumption	1,200 W
Weight	9 kg
Dimensions (mm)	482 x 420 x 44 (1u rack 19")

Power amplifier

MP-120D1 » 120 W

Class D digital power unit with speaker output of 120 W RMS power for 100 V line. With 775 mv / 0 dB audio input , volume control, protection circuits against peaks, short circuits, overheating and overload, and LED indicators for power and protection.

Power supply	230 V CA, 50 Hz
Nominal power	120 W
Audio input	775 mV / 0 dB
Loudspeaker output	100 V
Audio output	-
Frequency response	80 ~ 18,000 Hz
Signal-to-noise ratio	> 85 dB
Harmonic distortion THD	< 0,1%
Ethernet	-
Refrigeration	fans
Consumption	150 W
Dimensions (mm)	132 x 92 x 385
Weight	2.4 kg



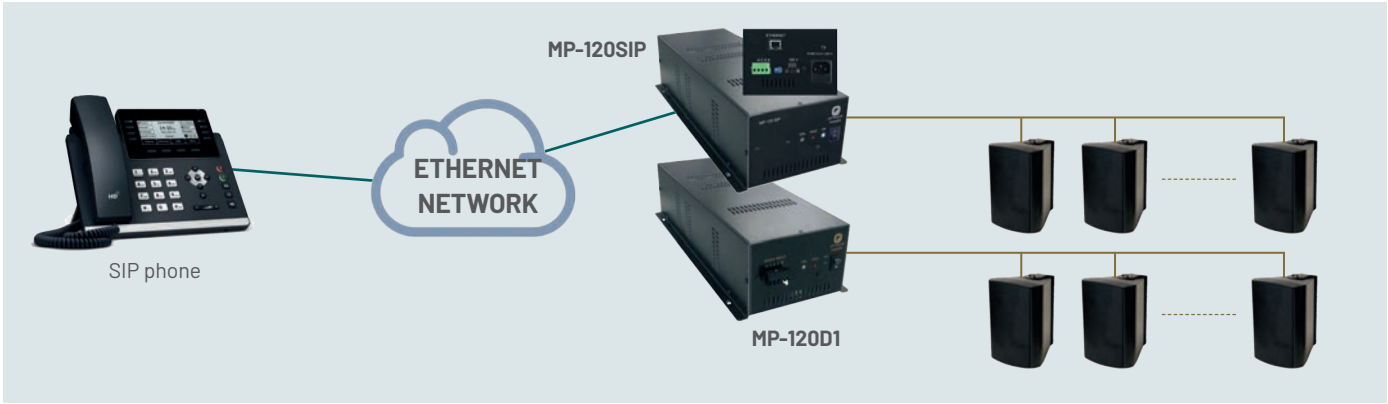
POWER AMPLIFIERS

SIP power amplifier

MP-120SIP » 120 W · SIP

Class D digital power unit with speaker output of 120 W RMS power for 100 V line. With audio input via IP/SIP interface, audio output of 775 mv / 0 dB, volume control, protection circuits against peaks, short circuits, overheating and overload, and LED indicators for power and protection.

Power supply	230 V CA, 50 Hz
Nominal power	120 W
Audio input	via interface IP/SIP
Loudspeaker output	100 V
Audio output	775 mV / 0 dB
Frequency response	80 ~ 18,000 Hz
Signal-to-noise ratio	> 85 dB
Harmonic distortion THD	< 0,1%
Ethernet	10 / 100 Mbps
Refrigeration	fans
Consumption	150 W
Dimensions (mm)	132 x 92 x 385
Weight	2.4 kg



MA-215SIP » 2 x 15W

Class D digital power unit with audio input via IP/SIP interface and 2 x 15 W RMS (8 ohms) audio output. Volume control and PoE power. This amplifier is a cost-effective solution to configure clusters of loudspeakers.

Protocols	IP, ARP, ICMP, DHCP, UDP, DNS, IGMP, SIP
Network interface	10/100 base-TX, RJ45
Output power	2 x 15 W RMS
Decoder	MPEG, ADPC
Power supply	PoE (external splitter)
Operating temperature	0 to 65°C
Standby consumption	< 300 mW
Dimensions	100 x 66 x 26 mm 105 x 33 x 26 mm (PoE splitter)
Colour	black
Weight	0.50 kg



ATTENUATORS

CV series

CV-4 » 4 W – CV-12 » 12 W – CV-40 » 40 W – CV-60 » 60 W – CV-P » 6 channels

The CV attenuators adjust the power delivery with a rotating switch with 6 attenuation positions and another 6 for silencing the signal. They have announcement security function, and the 12, 40 and 60 W models a transformer, suitable for systems with loudspeaker line supervision. The CV selector supports 6 100-V line inputs and uses a rotating switch to select one of them.

CV attenuator	
Input	1 x 100-V line
Output	1 x 100-V line
Adjusted power	4 / 12 / 40 / 60 W maximum
Volume control	in 6 steps
Channel selection	-
Announcement security	yes
Power supply	24 Vdc / 10 mA
Finish	white, ivory, silver, graphite
Mounting	in universal box

CV and CV-P are supplied without the M-420 frame

Ivory models: CV-4I · CV-12I · CV-40I · CV-60I · CV-PI · M-420I
Graphite color models: CV-4B · CV-12B · CV-40B · CV-60B · CV-PB · M-420B
White color models: CV-4W · CV-12W · CV-40W · CV-60W · CV-PW · M-420W
Silver color models: CV-4S · CV-12S · CV-40S · CV-60S · CV-PS · M-420S



AV series

AV-4 » 4 W – AV-40 » 40 W – AV-100 » 100 W
AV-4P » 4 W & 6 channels – AV-40P » 40 W & 6 channels

Volume attenuators for 100-V line loudspeakers. They have announcement security function for announcements broadcasting at maximum power even with the attenuator closed. Available models of 4 W, 40 W and 100 W without program selection, and 4 W and 40 W with musical program selector.



	AV-4	AV-40 / AV-100	AV-4P / AV-40P
Input	1 x 100-V line	1 x 100-V line	6 x 100-V line
Output	1 x 100-V line	1 x 100-V line	1 x 100-V line
Adjusted power	Up to 4 W	Up to 40 W/100 W	Up to 4 W/40 W
Volume control	in 6 steps	in 6 steps	in 6 steps
Announcement security	three lines (+, S & -C)	three lines (+, S & -C)	four lines (priority relay)
Channel selection	-	-	up to 6 channels
Dimensions (mm)	78 x 78 x 50	150 x 78 x 50	150 x 78 x 50
Weight	90 g	360 g / 650 g	190 g / 325 g
Finish	white ABS	white ABS	white ABS
Mounting	in universal box	in universal box	in universal box

SPEAKERS

Altavoces exponenciales

AET-100 » 100 W · 133 dB · IP65 · para túneles · EN 54

Weather-proof horn speaker for voice alarm applications. It has been developed for areas with extreme high ambient noise and is suitable for indoor and outdoor application (protection degree IP65), especially tunnels. It is built to withstand corrosive atmospheric contaminants, high moisture levels and temperature extremes. The horn provides a very high sound pressure level, a very balanced frequency response and a very low distortion.



Rated Power (RMS) 100 V	100 W, 50 W & 25 W
Impedance	100 Ω, 200 Ω & 400 Ω
Sensitivity	113 dB SPL at 1 W IEC268-5
Sound Pressure	133 dB SPL at 100 W IEC268-5
Sensitivity EN54-24	101 dB SPL at 1 W / 4 m
Frequency Response	250 ~ 10,000 Hz
Dispersion 1kHz / 4kHz	35° H, 25° V / 54° H, 15° V
Temperature range	-25°C ~ +70°C
Protection degree	IP65
Dimensions (mm) & weight	1228 x 832 x 413. 16 kg
Finish	Plastic (UL 94 V-0), black colour
Power selection	Terminals (4-pin)
Standard	EN54
Other	Thermal fuse and ceramic terminals
Mounting accessories (not included)	AET-100WH (standar bracket, 4 pieces) AET-100PH (premium bracket, 1 piece)



ceiling mount
with AET-100WH



ceiling mount
with AET-100PH

AC-930EN » 30 W · 113 dB · IP66 · EN 54

Horn speaker of 30 W RMS, 100 V line. Low impedance connection available (20 ohm). Impact resistant ABS housing UL94V0. Degree of protection IP66. EN-54 certified.

RMS power	30 W
Power selection	30, 20, 10 & 5 W
Low impedance	20 Ω
Frequency response	250 ~ 15,000 Hz
SPL 1 m, 1 kHz	97.9 dB (1 W) / 112.7 dB (30 W)
Operating temperature	-20° C a 90° C
Protection	IP66 (IEC-529)
Dimensions (mm)	303 (long), 235 (mouth)
Weight	2.17 kg
Finish	ABS UL94V0
Regulations	EN 54-24 / BS 5839, p.8



SPEAKERS

Horn speakers

AC-850T » 50 W · 127 dB · IP66 · aluminium

50 W RMS horn loudspeaker, 100 V line, with very high acoustic pressure, up to 127 dB (50 W, 1 m and 1 kHz) and with wide mouth for long distance transmission. Made in aluminium and with a metallic U-bracket, to be installed on the wall or ceiling. It has power selection through a rotary switch. IP 66 protection degree.

RMS power	50 W
Power selection	50 W, 30 W, 15 W & 7.5 W
SPL 1 m, 1 kHz	110 dB (1 W) / 127 dB (50 W)
Frequency response	160 ~ 8000 Hz
Protection	IP-66 (IEC 529)
Dimensions (mm)	Ø 508 x 470 (long)
Weight	3.65 kg
Finish	Aluminium, light grey



AC-730T » 30 W · 125 dB · IP66

30 W RMS horn loudspeaker, 100 V line, with very high acoustic pressure, up to 125 dB (30 W, 1 m and 1 kHz). Built-in ABS and with a steel U-bracket, to be installed on the wall or ceiling. It has power selection through a rotary switch and the possibility of low impedance connection (8 ohms). IP 66 protection degree.

RMS power	30 W
Power selection	30 W, 15 W, 7.5 W & 3.75 W
SPL 1 m, 1 kHz	110 dB (1 W) / 125 dB (30 W)
Frequency response	400 ~ 7500 Hz
Protection	IP-66 (IEC 529)
Dimensions (mm)	Ø 232.7 x 309.6 (long)
Weight	2.11 kg
Finish	ABS, grey colour (RAL7035)



AEI-12T » 12 W · 109 dB · IP67 · marine environments

Horn loudspeaker with a high degree of protection (IP67) to work in extreme weather conditions and maritime environments.

RMS power	12 W
Power selection	12, 6, 3 and 1 W
Low impedance connection	8 Ω
Frequency response	510 ~ 12,000 Hz
SPL 1 m, 1 kHz	98 dB (1 W)/109 dB (12 W)
Working temperature	-30°C to 70°C
Protection	IP67 (IEC-529)
Finish	HIPS RAL 7035
Dimensions (mm)	110 (long), 143 (mouth)
Weight	1.0 Kg



SPEAKERS

Horn speakers

AC-650T » 50 W · 126 dB · IP66 · aluminium

50 W RMS horn speaker for 100 V line, with circular mouth and made of aluminium. It has a steel U support, low impedance connection and IP66 protection degree.

RMS power	50 W
Power selection	50, 25, 12.5 & 6.25 16 Ω
SPL 1 m, 1 kHz	109 dB (1 W) / 126 dB (50 W)
Frequency response	380 ~ 6,500 Hz
Grado de protección	IP66 (IEC-529)
Dimensions (mm)	Ø 327 x 350
Weight	2.8 kg
Finish	aluminium and steel



AC-630T » 30 W · 124 dB · IP66 · aluminium

30 W RMS horn speaker for 100 V line, with circular mouth and made of aluminium. It has a steel U support, low impedance connection and IP66 protection degree.

RMS power	30 W
Power selection	30, 15, 7.5 & 3.8 W 8 Ω
SPL 1 m, 1 kHz	109 dB (1 W) / 124 dB (30 W)
Frequency response	380 ~ 10,000 Hz
Grado de protección	IP66 (IEC-529)
Dimensions (mm)	Ø 246 x 292
Weight	2.1 kg
Finish	aluminium and steel



AC-615T » 15 W · 119 dB · IP66 · aluminium

15 W RMS horn speaker for 100 V line, with circular mouth and made of aluminium. It has a steel U support, low impedance connection and IP66 protection degree.

RMS power	15 W
Power selection	15, 7.5, 3.75 & 1.9 W 8 Ω
SPL 1 m, 1 kHz	107 dB (1 W) / 119 dB (15 W)
Frequency response	300 ~ 10,000 Hz
Grado de protección	IP66 (IEC-529)
Dimensions (mm)	Ø 207 x 245
Weight	1.3 kg
Finish	aluminium and steel



SPEAKERS

Horn speakers

AC-520W » 20 W · 122 dB · IP66 · compact

20 W RMS horn speaker in 100 V line, with connection available in low impedance (8 ohms). Reduced dimensions to install in places with little space.

RMS power	20 W (30 W max)
Power selection	20 and 10 W
Low impedance	8 Ω
Frequency response	500 ~ 7,000 Hz
SPL 1 m, 1 kHz	105 dB (1 W) / 118 dB (20 W)
Protection	IP66 (IEC-529)
Dimensions (mm)	175 (long), 130 (mouth)
Weight	1.7 Kg
Finish	white ABS plastic



AE-15SIP » 12 W · 113 dB · IP67 · SIP

Horn loudspeaker with RJ45 port and network interface for connection via SIP protocol. It has an internal 15 W RMS amplifier with which it can reach a maximum SPL of 113 dB (1m, 1 kHz). Weatherproof with a degree of protection IP67. It incorporates U-type steel support, adjustable, for wall or ceiling installation.

RMS power	15 W
Power supply	PoE
Network interface	10/100 Base-TX, RJ 45
Protocol	SIP (VoIP)
Frequency response	400 ~ 8.000 Hz
SPL 1 m, 1 kHz	101 dB (1 W) / 113 dB (15 W)
Protection degree	IP67 (IEC529)
Dimensions (mm)	200 (mouth) x 230 (long)
Wight	2.8 kg
Finish	ABS, light gray colour



Megaphones

SJM-740SW » 35 W · 400 m · 10 h

35 W megaphone with a range of 400 m (1,400 m in open field) and 10 hours autonomy in voice reproduction. Powered by 8 type LR14 batteries. Includes handheld microphone, clip to hold it at the back, strap to hang on the shoulder, and a whistle and siren tone emission.

JE-303ASW » 15 W · 300 m · 8 h

15 W megaphone with a range of 300 m (900 m in open field) and 8 hours autonomy in voice reproduction. Powered by 8 LR6 batteries. It incorporates a microphone and a whistle and siren tone emission.

	SJM-740SW	JE-303ASW
Power supply	12 V CC (8 x batteries C/LR14)	12 V CC (8 x batteries AA/LR6)
Power	35 W max	15 W max
Microphone	hand held, 2.5 m long	built-in
Acoustic range	400 m (1.400 m open field)	300 m (900 m open space)
Battery life	10 hours (voice)	8 hours (voice)
Dimensions (mm)	211 Ø x 365	190 Ø x 315
Weight (without batteries)	1.7 kg	1 kg
Functions	whistle and siren tone	whistle and siren tone



SPEAKERS

Special speakers

ES-60W » 60 W · 120 dB · acoustic sphere

Sphere with an external reflector and 360° horizontal and 180° vertical radiation angle, suitable for achieving a uniform acoustic coverage in large zones with high ceilings.

Loudspeakers	6"
RMS power	60 W, 100 V
Power selection	60, 30, 20, 15, 10 & 7.5 W
Frequency response	100 ~ 13,000 Hz
SPL 1 m, 1 kHz	102 dB (1 W) / 120 dB (60 W)
Dimensions (mm)	385 (Ø) x 302
Weight	3.4 kg
Finish	high impact ABS, white
Mounting	pendant, three hooks



AER-301T » 30 W · 103 dB · IP66 · rock shape

Two-way loudspeaker (6,5" woofer + ½" tweeter) and 30 W RMS power, with 100 V and 8-ohm connection, weather resistant (IP66) and with a rock-shaped envelope, suitable for outdoor use like parks, gardens, courtyards...

Loudspeakers	6.5" woofer + ½" tweeter
RMS Power	30 W
Power Selection	30 W & 15 W (100 V) / 30 W (8 ohm)
SPL 1 m, 1 kHz	88 dB (1 W) / 103 dB (30 W)
Frequency response	100 ~ 20,000 Hz
IP Protection Range	IP66
Dimensions (mm)	256 x 300 x 270
Mounting Hole Size (mm)	Ø300 x 50
Weight	4 kg
Finish	fiberglass



AEM-15T » 15 W · 108 dB · mushroom shape

20 W, two-way loudspeaker with a mushroom-shaped envelope, suitable for outdoor use like parks, gardens, courtyards ...

Type	mushroom
Loudspeakers	8" woofer, 0.5" tweeter
RMS power	20 W
Power selection	20 & 10 W
Frequency response	80 ~ 15,000 Hz (+/- 6 dB)
SPL 1 m, 1 kHz	95 dB (1 W) / 108 dB (15 W)
Dimensions (mm)	245 x 215 x 215 aprox.
Weight	2.04 kg
Finish	ABS, metal grille, green



SPEAKERS

Sound projectors

SP-30BR » 30 W · 111 dB · IP55

Sound projector of 30 W, 100 V line, with high sound pressure and very good sound quality. For applications where it is necessary both the high performance of sound projectors and music broadcast. The speaker has several power taps and can be mounted on wall or ceiling with the included U-type bracket.

Speaker	5"
RMS power	30 W (100 V / 8 Ω)
Power selection	30 W, 15 W, 7.5 W & 3.75 W
SPL (1 m, 1 kHz)	96 dB (1 W) / 111 dB (30 W)
Frequency response	100 ~ 15,000 Hz
Protection degree	IP55
Dimension (mm)	170 ø x 272 depth
Weight	2 kg
Finish	ABS, aluminium grille
Colour	light grey (RAL7035)



SP-920EN » 20 W · 100 dB · IP66 · EN 54

Sound projector for 100 V line, power of 20 W RMS selectable at 10, 5, and 2.5 W. Weatherproof ABS enclosure with IP66 protection degree. Includes a separate junction box with ceramic terminals and thermal fuse. Metal U-bracket included.

RMS power	20, 10, 5 & 2.5 W
Speaker	1 x 5"
Frequency response	120 ~ 21,000 Hz
SPL 1 m 1 kHz	87 dB (1 W) / 100 dB (20 W)
Protection degree	IP66 (IEC-529)
Dimension (mm)	137 x 222
Weight	1.44 kg
Finish	white ABS (RAL9016)
Regulations	EN 54-24, BS 5839 p.8



SP-20D » 20 W · 99 dB · IP66 · bidirectional

Bidirectional sound projector, 20 W RMS power, 100 V line, with ABS plastic enclosure and aluminium grille. Degree of protection IP66.

RMS power	20 W (30 W max)
Speaker	2 x 5"
Power selection	20, 10, 5 & 2.5 W
Frequency response	120 ~ 20,000 Hz
SPL 1 m 1 kHz	86 dB (1 W) / 99 dB (20 W)
Protection degree	IP66 (IEC-529)
Dimension (mm)	203 (long), 150 (mounth)
Weight	2,6 kg
Regulations	ABS & aluminium, ivory colour



SPEAKERS

Sound projectors

PJ-20 » 20 W · 105 dB

20 W RMS sound projector, 6.5" speaker and cylindrical enclosure made of high impact polystyrene (HIPS), highly resistant to shocks and blows. U-type aluminium bracket for wall/ceiling mounting.

Speaker	6,5"
RMS power	20 W (30 W max)
Power selection	20, 10 & 5 W
Frequency response	110 ~ 15,000 Hz
SPL 1 m, 1 kHz	92 dB (1 W) / 105 dB (20 W)
Dimensions (mm)	245 (long), 170 (mounth)
Weight	1.75 kg
Finish	HIPS, white colour



PJ-10 » 10 W · 101 dB

10 W RMS sound projector, 5" speaker and cylindrical enclosure made of ABS. U-type aluminium bracket for wall/ceiling mounting.

Speaker	5"
RMS power	10 W (15 W max)
Power selection	10, 5 & 2.5 W
Frequency response	130 ~ 15,000 Hz
SPL 1 m, 1 kHz	91 dB (1 W) / 101 dB (10 W)
Dimensions (mm)	205 (long), 138 (mounth)
Weight	1,5 kg
Finish	ABS, white colour



SP-910DEN » 10 W · 100 dB · IP66 · EN 54 · bidirectional

Bidirectional sound projector with 2 x 6,5" loudspeakers, 10 W RMS power, 100 V line. Powder coated aluminium housing. Degree of protection IP66.

RMS power	10, 6, 3 & 1.5 W
Speaker	2 x 6.5"
Frequency response	79 ~ 17,500 Hz
SPL 1 m 1 kHz	89.6 dB (1 W) / 99.6 dB (10 W)
Protection degree	IP66 (IEC-529)
Dimension (mm)	165 x 200 x 162
Weight	2.35 kg
Finish	aluminium RAL 9010
Regulations	EN 54-24, BS 5839 p.8



PJ-20D » 20 W · 99 dB · IP66 · bidirectional

20W RMS bidirectional sound projector, 100V line, with a cylindrical ABS enclosure, aluminum metal grille, and an adjustable U-shaped bracket. Power selection (20, 10, and 5W) is done through cables. White color.

Speaker	2 x 5"
RMS power	20 W (100 V)
Power selection	20 W, 10 W & 5 W
SPL (1 m, 1 kHz)	86 dB (1 W) / 99 dB (20 W)
Frequency response	150 ~ 16,000 Hz
Protection degree	IP66
Dimension (mm)	138 ø x 200 depth
Weight	2,45 kg
Finish	ABS, aluminium grille



SPEAKERS

Sound projectors

FR-30VA » 30 W · 113 dB · IP66

Two-way acoustic projector. Both the enclosure and its wide mouth give this loudspeaker a broad response in terms of frequency, a dispersal angle of 85° and a high acoustic pressure of 113 dB at maximum power.

Speakers	1 x 5" + 1 x 1,5"
RMS power	30 W
Power selection	3.75 W, 7.5 W, 15 W and 30 W
SPL 1 m, 1 kHz	98 dB (1 W) / 113 dB (30 W)
Frequency response	80 ~ 20,000 Hz (-20 dB)
Dimensions (mm)	370 x 255 x 291
Protection degree	IP66
Weight	4,6 kg
Finish	ABS and PP with fibre glass, grey (RAL 7035)



SP-30BC » 30 W · 112 dB · IP66

Sound projector of 30 W, 100 V line, with high sound pressure and very good sound quality. The speaker has several power taps and can be mounted on wall or ceiling with the included U-type bracket.

Speaker	5"
RMS power	30 W (100 V / 8 Ω)
Power selection	30 W, 15 W, 7.5 W y 3.75 W
SPL 1 m, 1 kHz	97 dB (1 W) / 112 dB (30 W)
Frequency response	100 ~ 10,000 Hz
Protection degree	IP66
Dimension (mm)	366 x 172 x 272
Weight	3 kg
Finish	ABS, aluminium grille, light grey (RAL7035)



SP-30SW » 30 W · 99 dB · IP66

Sound projector of 30 W, 100 V line, prepared for outdoor installation with two mounting possibilities; on wall/ceiling with the swivel bracket or suspended from the ceiling with the 1 m steel cable. Mounting accessories included.

Speaker	woofer 5,25", tweeter 1"
RMS power	30 W (100 V / 8 Ω)
Power selection	30, 15, 7.5 y 3.75 W
SPL 1 m, 1 kHz	84 dB (1 W) / 99 dB (30)
Frequency response	110 ~ 20,000 Hz
Protection degree	IP66
Dimension (mm)	170 x 240
Weight	2,2 kg
Finish	PP & metallic grille. White colour RAL9003



SP-916PEN » 16 W · 97 dB · IP35 · EN 54

Sound projector of 16 W RMS, 100 V line, with a spherical enclosure made of ABS resistant to UV rays, for suspended ceiling installation. It incorporates ceramic terminals and thermal fuses.

RMS power	16, 8 & 4 W
Speaker	1 x 5"
Frequency response	130 ~ 13,200 Hz
SPL 1 m, 1 kHz	85 dB (1 W) / 97 dB (16 W)
Protection degree	IP 35 (IEC-529)
Dimensions (mm)	185 x 157
Weight	1.58 kg
Finish	ABS UL 94 HB. White RAL 9010
Regulations	EN 54-24, BS 5839 p.8

Installation suspended in ceiling. Includes 4.5 m hook and cable



SPEAKERS

Ceiling speakers

A-228EN » 8" · 20 W · 110 dB · EN 54

20 W RMS power 8" ceiling speaker, 100V line, with frameless metal grille and metal back cover. Quick installation using spring clamps with protective caps for vibrating damping.

Speaker	8"
RMS power	20, 10 & 5 W
Frequency response	50 ~ 18,900 Hz
SPL 1 m, 1 kHz	97.2 dB (1 W) / 110.2 dB (20 W)
Ceiling Cut-out (mm)	ø 240
Dimensions (mm)	ø 265 x 115 (depth)
Weight	1.60 kg
Finish	Metallic, housing & frame, RAL 9016
Regulations	EN 54-24



A-226DEN » 6" · 6 W · 100 dB · EN 54

6" ceiling loudspeaker for flush mounting with 6 W RMS power, 100 V line, with frameless metal grill and metal rear cover. Quick installation using spring clamps with anti-vibration protective caps.

Speaker	6"
RMS power	6 W, 3 W & 1.5 W
Frequency response	56 ~ 18,000 Hz
SPL 1 m, 1 kHz	92 dB (1 W) / 100 dB (6 W)
Ceiling Cut-out (mm)	ø 188
Dimensions (mm)	ø 220 x 107 (depth)
Weight	1.40 kg
Finish	Metallic, box and grid, RAL 9016
Regulations	EN 54-24



A-225DEN » 5" · 6 W · 98 dB · EN 54

5" ceiling loudspeaker for flush mounting with 6 W RMS power, 100 V line, with frameless metal grill and metal rear cover. Quick installation using spring clamps with anti-vibration protective caps.

Speaker	5"
RMS power	6 W, 3 W & 1.5 W
Frequency response	64 ~ 21,500 Hz
SPL 1 m, 1 kHz	90 dB (1 W) / 98 dB (6 W)
Ceiling Cut-out (mm)	ø 161 ~ 167
Dimensions (mm)	ø 180 x 99 (fondo)
Weight	0,78 kg
Finish	Metallic, box and grid. RAL 9016
Regulations	EN 54-24



A-225EN » 5" · 6 W · 94,5 dB · EN 54

A 5" ceiling speaker of 6 W, 100 V line, with high sound pressure level. It can be installed in shallow suspended ceilings and has a antistatic PET-plastic contact protection

Speaker	5"
RMS power	6, 3 & 1.5 W
Frequency response	57 ~ 24,000 Hz
SPL 1 m, 1 kHz	86.8 dB (1 W) / 94.5 (6 W)
Ceiling Cut-out (mm)	ø 150
Dimensions (mm)	ø 181.5 x 66
Weight	0.60 kg
Finish	RAL 9016
Regulations	EN 54-24



SPEAKERS

Ceiling speakers

A-258BTM » 8" · 20 W · 107 dB

8" and 20 W RMS ceiling speaker, 100 V line, circular metal grill, ABS frame and spring mounting system.

Speaker	8"
RMS power	20 W
Power selection	20 W, 10 W, 2.5 W & 1 W
SPL 1 m, 1 kHz	93 dB (1 W) / 112 dB (20 W)
Frequency response	100 ~ 15,000 Hz
Ceiling Cut-out (mm)	Ø 210 mm
Dimensions (mm)	Ø 232 x 90 (depth)
Weight	1 kg
Finish	ABS, metallic grille. White



A-256BTM » 6" · 6 W · 101 dB

6" and 6 W RMS ceiling speaker, 100 V line, circular metal grill, ABS frame and spring mounting system.

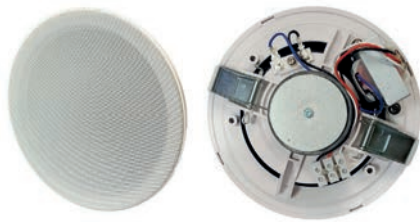
Speaker	6"
RMS power	6 W
Power selection	6 W, 3 W & 1 W
SPL 1 m, 1 kHz	93 dB (1W) / 101 dB (6 W)
Frequency response	100 ~ 15,000 Hz
Ceiling Cut-out (mm)	Ø 170 mm
Dimensions (mm)	Ø 186 x 71 (depth)
Weight	0.76 kg
Finish	ABS, metallic grille. White



A-255BTM » 5" · 6 W · 98 dB

5" and 6 W RMS ceiling speaker, 100 V line, circular metal grill, ABS frame and spring mounting system.

Speaker	5"
RMS power	6 W
Power selection	6 W, 3 W & 1 W
SPL 1 m, 1 kHz	93 dB (1 W) / 100 (6 W)
Frequency response	100 ~ 15,000 Hz
Ceiling Cut-out (mm)	Ø 145 mm
Dimensions (mm)	Ø 160 x 54 (depth)
Weight	0.5 kg
Finish	ABS, metallic grille. White



A-252BTM » 2,5" · 6 W · 94 dB

2.5" and 6 W RMS ceiling speaker, 100 V line, circular metal grill, ABS frame and spring mounting system.

Speaker	2,5"
RMS power	6 W
Power selection	6 W, 3 W & 1 W
SPL 1 m, 1 kHz	87 dB (1 W) / 94 dB (6 W)
Frequency response	120 ~ 20,000 Hz
Ceiling Cut-out (mm)	Ø 95 mm
Dimensions (mm)	Ø 103 x 78 (depth)
Weight	0.44 kg
Finish	ABS, metallic grille. White



SPEAKERS

Ceiling speakers

A-254BTC » 4" · 6 W · 97 dB

4" and 6 W RMS ceiling speaker, 100 V line, with a circular metal grille, and frame and rear box in ABS with spring mounting system.

Speaker	4"
Power selection	6 W & 3 W
Frequency response	120 ~ 20,000 Hz
SPL 1 m, 1 kHz	89 dB (1 W) / 97 dB (6 W)
Dimensions (mm)	Ø 140 x 80 (depth)
Ceiling Cut-out (mm)	Ø 125 mm
Weight	0.83 kg
Finish	ABS and aluminium. White (RAL 9016)



A-223DEN » 6 W · 96 dB · EN 54

Ceiling loudspeaker for flush mounting with 6 W RMS power, 66 mm diameter, 100 V line, with frameless metal grill and metal rear cover. Fast and uncomplicated installation through spring snap lock with short clamping distance.

Speaker	66 mm
RMS power	6, 3 & 1.5 W
Frequency response	220 ~ 17,000 Hz
SPL 1 W / 1 m, IEC 268-5	88 dB (1 W) / 96 dB (6 W)
Ceiling Cut-out (mm)	Ø 90
Dimensions (mm)	Ø 105 x 80
Weight	0.64 kg
Finish	RAL 9016
Regulations	EN 54-24



A-262IP » 2.5" · 6 W · 94 dB · IP55

2.5" and 6 W RMS ceiling speaker, 100 V line, with a circular metal grille, and frame and rear box in ABS with spring mounting system. Prepared for outdoors: IP55 protection and temperature range from -30° to 60° C.

Speaker	2.5"
Power selection	6, 3 & 1.5 W 8 Ω
Frequency response	220 ~ 25,000 Hz
SPL 1 m, 1 kHz	86 dB (1 W) / 94 dB (6 W)
Dimensions (mm)	Ø 100 mm x 92 (depth)
Ceiling Cut-out (mm)	Ø 92 mm
Weight	0.59 kg
Finish	ABS and aluminium. White (RAL 9016)
Protection degree	IP55 (IEC529)



A-257DTM » 6.5" + 0.75" · 20 W · 103 dB

2-way in-ceiling speaker for 100 V (20 W) line installations or low impedance at 8 ohms (60 W). Assembly by rotating tabs.

Speaker	woofer 6.5" Kevlar, tweeter 0.75"
RMS power	20, 10 & 5 W (100 V) / 60 W (8 Ω)
SPL 1 m, 1 kHz	90 dB (1 W) / 103 dB (20 W)
Frequency response	65 ~ 20,000 Hz
Ceiling Cut-out (mm)	Ø 205 mm
Dimensions (mm)	Ø 227 x 87 (depth)
Weight	1,75 kg
Finish	white ABS, metallic grille



SPEAKERS

Ceiling speakers

AS-226EN » 6.5" · 10 W · 103 dB · EN 54

6.5" and 10 W RMS ceiling speaker, 100 V line, with high sound pressure level, for surface mounting. EN 54-24 certified. The speaker is also compliant with the British Standard BS 5839, part 8.

Speaker	6.5"
RMS power	10, 6, 3 & 1.5 W
Frequency response	230 ~ 24,000 Hz
SPL 1 m, 1 kHz	93 dB (1 W) / 103 dB (10 W)
Temperature range	-20 / +80 °C
Protection degree	IP 21C
Dimensions (mm)	170 x 75
Weight	1.30 kg
Finish	RAL 9010
Mounting	screws
Regulations	EN 54-24 / BS 5839 p.8



A-256ATS » 6" · 6 W · 101 dB

Weight
Finish

Speaker	6"
RMS power	6 W (9 W max)
SPL 1 m, 1 kHz	6, 3 & 1 W
Frequency response	100 ~ 15,000 Hz
Ceiling Cut-out (mm)	93 dB (1 W) / 101 dB (6 W)
Dimensions (mm)	Ø 246 x 86
Weight	0.75 kg
Finish	ABS & metal, white RAL 9016



A-255ATS » 5" · 6 W · 100 dB

Speakers for mounting on the surface of the ceiling, 5" and 6 W RMS, 100 V line, with circular metal grille and frame and box in ABS plastic.

Speaker	5"
RMS power	6 W (9 W max)
SPL 1 m, 1 kHz	6, 3 & 1 W
Frequency response	100 ~ 15,000 Hz
Ceiling Cut-out (mm)	92 dB (1 W) / 100 dB (6 W)
Dimensions (mm)	Ø 210 x 74
Weight	0.70 kg
Finish	ABS & metal, white RAL 9016



A-254ATS » 4" · 6 W · 100 dB

Speakers for mounting on the surface of the ceiling, 4" and 6 W RMS, 100 V line, with circular metal grille and frame and box in ABS plastic.

Speaker	4"
RMS power	6 W (9 W max)
SPL 1 m, 1 kHz	6, 3 & 1 W
Frequency response	100 ~ 15,000 Hz
Ceiling Cut-out (mm)	92 dB (1 W) / 100 dB (6 W)
Dimensions (mm)	Ø 207 x 70
Weight	0.70 kg
Finish	ABS & metal, white RAL 9016

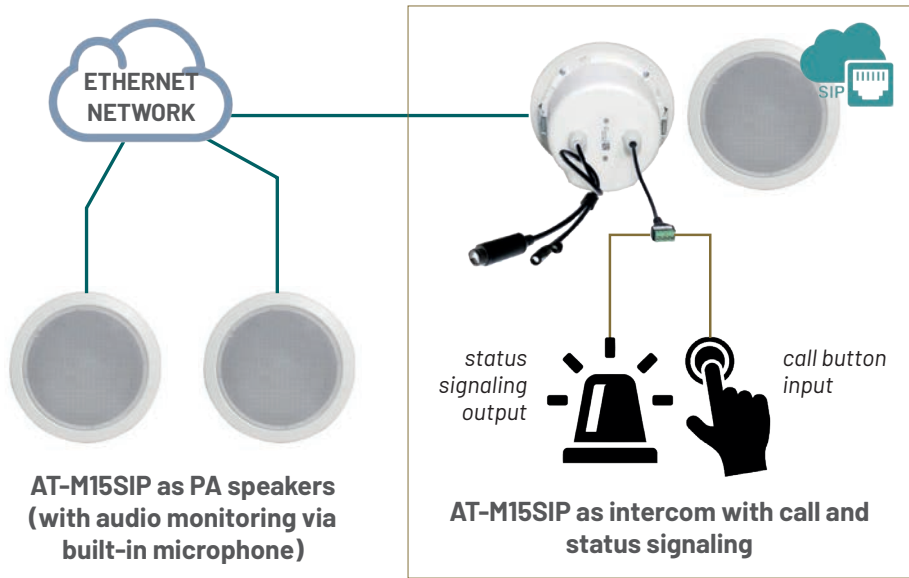


SPEAKERS

Ceiling speakers

AT-M15SIP » 15 W · 103 dB · SIP · microphone

Flush-mounted ceiling loudspeaker with RJ45 port and network interface for connection via SIP protocol. It has an internal 15 W RMS amplifier that allows a maximum SPL of 103 dB (1m, 1 kHz). It includes a microphone for supervision and/or intercommunication, an input contact and another output contact.



Power supply	12/24 V DC PoE+
Rated output Power	15 W RMS
Microphone sensitivity	52 dB
SPL 1 m, 1 kHz	91 dB (1 W, 1 m) 103 dB (15 W, 1 m)
Ethernet communication	TCP/UDP, SIP (P2P & server), UDP multicast
Ethernet interface	10/100Base-TX, RJ45 Port
Audio decoding	MPEG, ADPC
SIP audio codec	G.711a, G.711u, G.722
Volume control	by software
Frequency response	100 ~ 18.000 Hz
Contacts	1 input & 1 output
Finish	painted metal, white color
Consumption	1 W standby, 17 W maximum
Weight	1.2 Kg
Dimensions	200 ø x 90 mm
Cut-out hole	175 mm

*A-258SB » 8" · 50 W · 107 dB · subwoofer

Ceiling speaker for low frequencies reproduction, with 8" speaker and 50 W RMS power, high sound pressure level (up to 107 dB) and with the possibility of connection to 8 ohms and 100 V line. Suitable as bass reinforcement in any public address installation.

Speaker	8"
RMS power	50 W (100 W program)
Power selection	100 V, 8 Ω, OFF
SPL 1 m, 1 kHz	90 dB (1 W) / 107 dB (50 W)
Frequency response	50 ~ 200 Hz
Dimensions (mm)	Ø 280 x 192. Ceiling cut-out Ø 250
Weight	4 kg
Finish	ABS and metallic grille, white RAL9003



SPEAKERS

Two-way ceiling loudspeakers

A-258MHQ » 2-way · 60 W · 110 dB

60 W RMS two-way speaker for flush mounting, 100 V line, with connection available in low impedance. Great sound quality with wide frequency response. Rear box and rotating tabs for quick assembly.

Speaker	8" woofer + 1" tweeter
RMS power	60 W (100 V) / 80 W (8 Ω)
Power selection	60, 30, 15, 7.5 & 3.75 W (100 V)
SPL 1 m, 1kHz	92 dB (1 W) 110 dB (60 W)
Frequency response	55 ~ 20,000 Hz
Dimensions (mm)	Ø 320 x 245. Ceiling cut-out Ø 292
Weight	5.2 kg
Finish	ABS, metallic grille. White (RAL9016)



A-226QEN » 2-way · 50 W · 106,5 dB · EN 54

Two-way loudspeaker with 50 W RMS, 100 V line, suitable for broadcasting voice messages and background music with excellent sound quality. It also has a low impedance connection. With frameless metal grille and sturdy metal housing. Quick installation by rotating tabs.

Speaker	tweeter + 6,5"
RMS power	50 W (100 V), 50 W (8 Ω)
Power selection	50, 25, 12.5 & 6.25 W (100 V)
SPL 1 m, 1kHz	89.5 dB (1 W) / 106.5 dB (50 W)
Frequency response	80 ~ 22,200 Hz
Dimensions (mm)	Ø 264 x 240. Ceiling cut-out Ø 238
Weight	3.75 kg
Finish	steel, metallic grille, white (RAL 9016)
Regulations	EN 54-24 / BS 5839, p.8



A-258MAC » 2-way · 40 W · 107 dB

40 W RMS two-way speaker for flush mounting, 100 V line, with connection available in low impedance. With rear box to avoid depending on the acoustic characteristics of a false ceiling, transformer for 100-V line and rotating tabs for fast mounting.

Speaker	8,0" + 0,5"
RMS power	40 W (60 W max)
Power selection	40, 20, 10 & 5 W / 8 Ω
SPL 1 m, 1kHz	100 ~ 18,000 Hz
Frequency response	91 dB (1 W) / 107 dB (30 W)
Dimensions (mm)	Ø 280 x 190. Ceiling cut-out Ø 250
Weight	2.80 kg
Finish	ABS and metallic grille, white (RAL9016)



SPEAKERS

Two-way ceiling loudspeakers

A-256MHQ » 2-way · 30 W · 103 dB

30 W RMS two-way speaker for flush mounting, 100 V line, with connection available in low impedance. Great sound quality with wide frequency response. Rear box and rotating tabs for quick assembly.

Speaker	6,5" woofer + 1" tweeter
RMS power	30 W (100 V), 75 W (8 Ω)
Power selection	30, 15, 7.5 & 3.75 W (100 V)
SPL 1 m, 1kHz	88 dB (1 W) 103 dB (30 W)
Frequency response	60 ~ 20,000 Hz
Dimensions (mm)	Ø 267 x 162. Ceiling cut-out Ø 240
Weight	2.7 kg
Finish	ABS, metallic grille, white (RAL 9016)



A-256MAC » 2-way · 30 W · 105 dB

30 W RMS two-way speaker for flush mounting, 100 V line, with connection available in low impedance. With rear box to avoid depending on the acoustic characteristics of a false ceiling, transformer for 100-V line and rotating tabs for fast mounting.

Speaker	6,0" + 0,5"
RMS power	30 W (45 W max)
Power selection	30, 15, 7.5 & 3.8 W / 8 Ω
SPL 1 m, 1kHz	100 ~ 20,000 Hz
Frequency response	90 dB (1 W) / 105 dB (30 W)
Dimensions (mm)	Ø 240 x 155. Ceiling cut-out Ø 210
Weight	2 kg
Finish	ABS + metallic grille, white (RAL9016)



A-225QEN » 2-way · 25 W · 102 dB · EN 54

Two-way loudspeaker with 25 W RMS, 100 V line, suitable for broadcasting voice messages and background music with excellent sound quality. It also has a low impedance connection. With frameless metal grille and sturdy metal housing. Quick installation by rotating tabs.

Speaker	tweeter + 5"
RMS power	25 W (100 V), 25 W (8 Ω)
Power selection	25, 12.5 & 6.25 W (100 V)
SPL 1 m, 1kHz	87.8 dB (1 W) / 101.8 dB (25 W)
Frequency response	111 ~ 21,600 Hz
Dimensions (mm)	Ø 216.5 x 141. Ceiling cut-out Ø 186
Weight	1.8 kg
Finish	ABS, metallic grille, white (RAL 9016)
Regulations	EN 54-24 / BS 5839, p.8



SPEAKERS

Two-way speakers

BS-208 | BS-208W » 170 W · 8 Ω · black | white

170 W RMS two-way speaker at 8 ohms, made of birch plywood, with a passive crossover, high-quality 8"transducer and 1" Kapton driver with high sensitivity and lower distortion for outstanding detail and clarity in high frequencies without harshness. Dual Euroblock and NL4 connectors(input and link) for easy connection. U-type bracket included.

Enclosure	trapezoidal bass reflex
Power	170 W RMS / 340 W program
Frequency response	70 ~ 18,000 Hz
Transducers	8" woofer + 1" tweeter Kapton driver
Crossover frequency	2,200 Hz
max SPL (peak)	95 dB (1 W) / 118 dB (170 W)
Connectors	2x NL4MP speakon + Euroblock
Finish	birch plywood 12 mm + metallic grille
Colour	U type (included) or swivel bracket (option)
Dimensions (mm)	394 x 240 x 255
Weight	8 kg

Available Mounting brackets to form groups of 2 or 4 units, ±22.5° adjustable anchorage and IP54 protective junction box.



BS-208T | BS-208WT » 100 W · 100 V · black | white

100 W RMS two-way speaker, 100 V line, made of birch plywood, with a passive crossover, high-quality 8"transducer and 1" Kapton driver with high sensitivity and lower distortion for outstanding detail and clarity in high frequencies without harshness. Dual Euroblock and NL4 connectors(input and link) for easy connection. U-type bracket included.

Enclosure	trapezoidal bass reflex
Power	100 W RMS
Frequency response	70 ~ 18,000 Hz
Transducers	8" woofer + 1" tweeter Kapton driver
Crossover frequency	2,200 Hz
max SPL (peak)	95 dB (1 W) / 115dB (100 W)
Connectors	2x NL4MP speakon + Euroblock
Finish	birch plywood 12 mm + metallic grille
Colour	U type (included) or swivel bracket (option)
Dimensions (mm)	394 x 240 x 255
Weight	8.5 kg

Available Mounting brackets to form groups of 2 or 4 units, ±22.5° adjustable anchorage and IP54 protective junction box.



LA-100T » 100 W · 100 V / 8 Ω · line array

Speaker system consisting of four 3" speakers in line in an elegant and slim enclosure with bass reinforcement, designed for conference rooms, places of worship, train station or airport lobbies... The system achieves a wide frequency response and high sound pressure.

Enclosure	bass reflex
Power	100 W RMS / 200 W program (8 Ω)
Power selection	100, 50 & 25 W
Frequency response	80 ~ 20,000 Hz (-10 dB)
Transducers	4 x 3"
SPL 1 m, 1kHz	98 dB (1 W) / 118 dB (100 W)
Dispersion	horizontal > 120°, vertical > 20°
Connectors	block terminals
Finish	ABS and fiberglass. Black
Bracket	adjustable (included)
Dimensions (mm)	530 x 100 x 150
Weight	5.38 kg



SPEAKERS

Two-way speakers

BS-60BA | BS-60WA » 60 W · 106 dB · black | white

Two-way speaker with 8" woofer and 1" twitter, maximum power of 60 W RMS in 100 V line, with power taps of 30, 15 & 7.5 W. Also available the low impedance connection of 8 Ω.

Speaker	woofer 8", tweeter 1"
RMS power	60, 30, 15 & 7.5 W
Sensitivity	88 dB SPL (1 W, 1 m, 1 kHz)
Sound Pressure	106 dB SPL (60 W, 1 m, 1 kHz)
Frequency Response	40 ~ 20,000 Hz
Dimensions (mm)	289 (width) x 417 (height) x 255 (depth)
Weight	6.6 kg
Finish	box in ABS & powder coated iron grille
Colour	black (BS-60BA), white (BS-60WA)
Regulations	U type mounting bracket



CA-950EN | CA-950WEN » 50 W · 106 dB · IP65 · EN 54 · black | white

Two-way compact speaker, power of 50 W RMS at 100 V line, also with connection available at 8 ohms. Protection degree IP65.

RMS power	50 W
Power selection	50, 25, 12.5 & 6.25 W (100 V) 50 W (8 Ω)
Frequency response	53 ~ 20,300 Hz
SPL 1 W / 1 m, IEC 268-5	88.7 dB (1 W) / 105.7 dB (50 W)
Dispersion -6 dB, 1 KHz	152° (H) x 114° (V)
Protection degree	IP65
Dimensions (mm)	330 x 205 x 192
Weight	3.65 kg
Finish	black (RAL9011) or white (RAL9010)
Mounting	swivel bracket
Regulations	54-24



BS-40BA | BS-40WA » 40 W · 104 dB · black | white

40 W RMS two-way speaker for flush mounting, 100 V line, with connection available in low impedance. For quality music and intelligible announcements in restaurants, bars, musical bars, shopping centres, conference halls, fashion stores... With universal mounting bracket to place and direct them on the wall or ceiling

Speaker	woofer 6" + tweeter 1"
RMS power	40 W
Power selection	40, 20, 10 & 5 W (100 V) 40 W (8 Ω)
Frequency response	70 ~ 20,000 Hz
SPL 1 m, 1 kHz	88 dB (1 W), 104 dB (40 W)
Dimensions (mm)	215 x 284 x 190
Weight	3.5 kg
Finish	ABS black (BA) o white (WA)



SPEAKERS

Two-way speakers

WCM-32BT | WCM-32WT » 32 W · 105 dB · IP56 · black | white

Two-way speaker for outdoors (IP56) with power rating of 60 W @ 8 Ω or 32 W @ 100 V line, selectable by rotary switch. 5.25" woofer for low and medium frequencies and 1.42" tweeter for high frequencies. ABS black or white enclosure, metallic grille and adjustable bracket.

Loudspeaker	woofer 5.25" + tweeter 1.42"
Rated power (RMS)	60 W (8 Ω) / 32 W (100 V)
Power taps (100 V)	32, 16, 8, 4 & 2 W, rotary switch
Low impedance	8 Ω
Frequency response	60 ~ 20.000 Hz
SPL 1 m, 1 kHz	90 dB (1 W), 105 dB (32 W)
Dimensions (mm)	190 (width) x 256 (height) x 225 (deep)
Weight	2.6 kg
Finish	ABS & aluminium grille
Protection	IP56
Mounting	type U adjustable bracket



BS-30BHQ | BS-30WHQ » 30 W · 103 dB · black | white

Two-way loudspeaker (5" + 1"), 30 W RMS of power, 100 V line, with connection available at 8 ohm. It can be installed on wall or ceiling with the included bracket. Available in black and white. Due to its careful aesthetics and good audio quality, it is suitable for public address systems intended for music broadcasting, in addition to the emission of live or prerecorded messages, in shopping malls, hotels, exhibitions centres...

Speakers	Woofer 5" & Tweeter 1"
RMS power	30 W
Power selection	30, 15, 7.5 & 3.75 (100 V) 30 W (8 Ω)
Sensitivity	88 dB SPL at 1 W, 1 m & 1 kHz
SPL	103 dB SPL at 30 W, 1 m & 1 kHz
Frequency response	60 ~ 20,000 Hz
Dimensions (mm)	255 x 178 x 220
Weight	2.38 kg
Finish	HIPS, metallic grille
Mounting	adjustable bracket



WCM-20BT | WCM-20WT » 20 W · 101 dB · IP55 · black | white

wo-way speaker for outdoors (IP55) with maximum power rating of 20 W and selectable, through wires connection, to 20,10, 5 and 2.5 W. Also available the low impedance connection (8 ohm). 4" woofer for low and medium frequencies and 1" tweeter for high frequencies. ABS HIPS black, aluminium grille and adjustable bracket.

Loudspeaker	woofer 4" + twitter 1"
Rated power (RMS)	20 W
Power selection (100 V)	20, 10, 5 and 2.5 W
Low impedance	8 Ω
Frequency response	90 ~ 20,000 Hz
SPL 1 m, 1 kHz	88 dB (1 W) / 101 dB (20 W)
Protection	IP55 (IEC-529)
Dimensions (mm)	158 x 129 x 238
Weight	2.38 kg
Finish	black ABS HIPS & aluminium grille



SPEAKERS

Two-way speakers

BS-20BA | BS-20WA » 20 W · 102 dB · black | white

20 W RMS two-way speaker for flush mounting, 100 V line, with connection available in low impedance. For quality music and intelligible announcements in restaurants, bars, musical bars, shopping centres, conference halls, fashion stores... With universal mounting bracket to place and direct them on the wall or ceiling

Speaker	woofer 4" + tweeter 1"
RMS power	20 W
Power selection	20, 10, 5 & 2.5 W (100 V) 20 W (8 Ω)
Frequency response	100 ~ 20,000 Hz
SPL 1 m, 1 kHz	89 dB (1 W), 102 dB (20 W)
Dimensions (mm)	170 x 215 x 150
Weight	2.2 kg
Finish	ABS black (BA) o white (WA)



CA-915EN | CA-915WEN » 15 W · 94,3 dB · IP65 · EN 54 · black | white

Two-way compact speaker, power of 15 W RMS at 100 V line, also with connection available at 8 ohms. Protection degree IP65.

RMS power	15 W
Power selection	15, 7.5, 3.75 & 1.8 W (100 V) 15 W (8 Ω)
Frequency response	82 ~ 23,500 Hz
SPL 1 W / 1 m, IEC 268-5	82.5 dB (1 W) / 94.3 dB (15 W)
Dispersion -6 dB, 1 KHz	186° (H) x 186° (V)
Protection degree	IP65
Dimensions (mm)	210 x 130 x 120 mm
Weight	1.70 kg
Finish	black (RAL9011) or white (RAL9010)
Mounting	swivel bracket
Regulations	EN 54-24



BSA-215W » 2 x 15 W · pair active + passive speakers

Two-way stereo system, consisting of one active and one passive loudspeaker, suitable for classrooms, hotel rooms, meeting rooms, gyms, bars...

Power	2 x 15 W at 8 Ω
Speakers	woofer 5.25" & tweeter 0.5"
Sensitivity	86 dB
Frequency response	70 Hz ~ 16 kHz (±3 dB)
Tone control	bass & treble, ±12 dB
Connectivity Bluetooth	V4.2 (10 m)
Power supply	100 ~ 240 V AC / 50 ~ 60 Hz / 50 W max.
Finish	PP y rejilla metálica. Color blanco
Dimensions (mm)	183 x 164 x 245
Weight	2.53 kg



BS-6BA | BS-6WA » 6 W · 98 dB · black | white

6 W RMS two-way speaker for flush mounting, 100 V line, for situations in which musical quality is needed and, due to its small size, ease of installation. Universal anchoring for wall or ceiling.

Speaker	woofer 3" + tweeter 1"
RMS power	6 W
Power selection	6, 3 & 1.5 W (100 V) 6 W (8 Ω)
Frequency response	100 ~ 20,000 Hz
SPL 1 m, 1 kHz	90 dB (1 W), 98 dB (6 W)
Dimensions (mm)	95 x 141 x 100
Weight	0.8 kg
Finish	ABS black (BA) o white (WA)



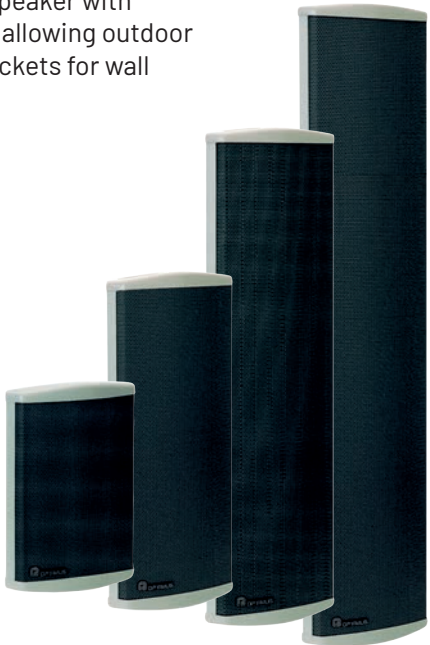
SPEAKERS

Acoustic columns

- C-1120 » 1 x 5" · 20 W · 105 dB
- C-1240 » 2 x 5" · 40 W · 110 dB
- C-1360 » 3 x 5" · 60 W · 112 dB
- C-1480 » 4 x 5" · 80 W · 115 dB

Acoustic columns formed by 5" loudspeaker with treble disperser in a metal enclosure allowing outdoor installation. The columns include brackets for wall mounting.

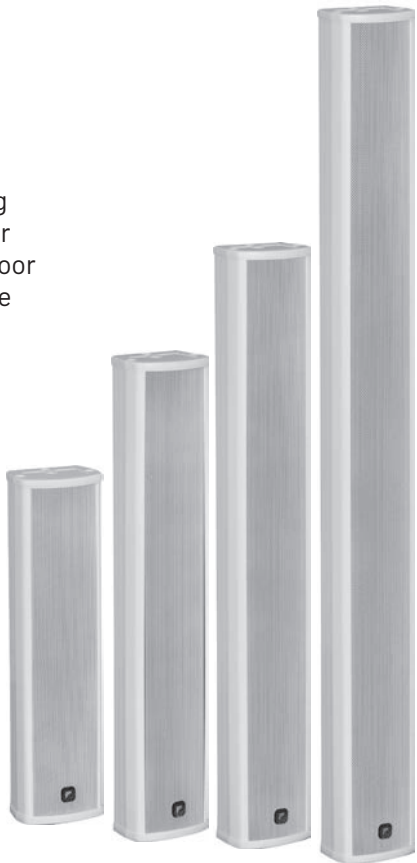
	C-1120	C-1240	C-1360	C-1480
Speakers	1 of 5", disperser	2 of 5", disperser	3 of 5", disperser	4 of 5", disperser
RMS power	20 W	40 W	60 W	80 W
Power selection	20, 15 & 10 W	40, 30 & 20 W	60, 45 & 30 W	80, 60 & 40 W
Frequency response	100 ~ 17,000 Hz	100 ~ 17,000 Hz	100 ~ 17,000 Hz	100 ~ 17,000 Hz
SPL (1 m, 1 kHz)	92 dB (1 W)	94 dB (1 W)	95 dB (1 W)	96 dB (1 W)
SPL max (1 m, 1 kHz)	105 dB (20 W)	110 dB (40 W)	112 dB (60 W)	115 dB (80 W)
Dimensions (mm)	197 x 290 x 118	197 x 485 x 118	197 x 700 x 118	197 x 905 x 118
Finish	metal	metal	metal	metal
Color	RAL 7035/7037	RAL 7035/7037	RAL 7035/7037	RAL 7035/7037
Weight	2 kg	3.1 kg	4.4 kg	5.7 kg



- C-620A » 4 x 2,5" · 20 W · 104 dB
- C-630A » 6 x 2,5" · 30 W · 107 dB
- C-640A » 8 x 2,5" · 40 W · 109 dB
- C-660A » 12 x 2,5" · 60 W · 111 dB

Acoustic columns formed by 2.5" loudspeakers in a narrow and long enclosure with an elegant exterior appearance. The outdoor and indoor columns are metal and include the brackets for wall mounting.

	C-620A	C-630A	C-640A	C-660A
Speakers	4 x 2,5"	6 x 2,5"	8 x 2,5"	12 x 2,5"
RMS power	20 W	30 W	40 W	60 W
Power selection	20 & 10 W	30 & 15 W	40 & 20 W	60 & 30 W
Frequency response	170 ~ 15,000 Hz	170 ~ 15,000 Hz	170 ~ 15,000 Hz	170 ~ 15,000 Hz
SPL (1 m, 1 kHz)	91 dB (1 W)	92 dB (1 W)	93 dB (1 W)	93 dB (1 W)
SPL max	104 dB (20 W)	107 dB (30 W)	109 dB (40 W)	111 dB (60 W)
Dimensions (mm)	106 x 405 x 75	106 x 548 x 75	106 x 691 x 75	106 x 985 x 75
Weight	2.04 kg	2.74 kg	3.46 kg	5.20 kg
Finish	white aluminium	white aluminium	white aluminium	white aluminium
	RAL 9016	RAL 9016	RAL 9016	RAL 9016



MICROPHONES

Desk microphones

- MD-30R12 » 12 zones · -60 dB / 0 dB

Desk microphone with 12 zone selection keys. To send messages to one, several or all areas of the public address system. Last message repeat function.

Capsule	dynamic, unidirectional
Output impedance	600 ohm, balanced
Frequency response	1,300 ~ 14,000 Hz
Output level	-60 dB / 0 dB
Power supply	24 V dc
Gong	3 or 4 notes
Dimensions	218.2 x 226.2 x 75 mm, gooseneck 300 mm
Weight	1.6 kg
Finish	bayblend color RAL 7021
Message repetition	last 16 seconds



- MD-18 » -60 dB / 0 dB

Desk microphone for all call announcements. Selectable output level: microphone (-60 dB) or 0 dB. Power supply included.

Power	12-24 V DC
Consumption	50 mA
Output level	-60 dB / 0 dB selectable
Connector	DIN 7P (DIN 5P compatible)
Frequency response	250 ~ 10,500 Hz
Output contact	Solid state relay
Audio controls	Mic volume, chime volume, compressor
Priority controls	1st in 1st / Cascade, ACK
Gong	Start
Talk mode	PTT or lock
Finish	ABS cover, zinc base
Dimensions	Base: 170 x 112.5 x 63.6 mm. Gooseneck: 342 mm
Weight	0.8 kg
Accessories (included)	Power supply 12 V DC 0.5 A



- MD-15 » -60 dB / -20 dB

Desk microphone for all call announcements. Selectable output level: microphone (-60 dB) or aux (-20 dB). Power supply included.

Power supply	12-24 V DC
Consumption	100 mA
Output level	-60 dB / -20 dB selectable
Connector	DIN 5P
Frequency response	100 ~ 15 kHz
Output contact	solid state relay
Audio controls	mic volume, chime volume, noise gate
Gong	start, start/end, none
Talk mode	PTT or lock
Finish	ABS cover, zinc base
Dimensions	base: 170 x 112.5 x 63.6 mm, gooseneck: 342 mm
Weight	0.8 kg
Accessories (included)	power supply 12 V DC 0.5 A



MICROPHONES

Desk microphones

2693 » with inhibition system

A microphone for announcements with inhibition system if several are working on the same loudspeaker zone (habitual in medical clinics), and “pilot pass output” function with adjustable timing. Suitable, for instance, in managing announcements in waiting rooms.

Switched channels	1 stereo or 2 mono
Frequency response	200 ~ 15,000 Hz
Nominal audio output	4.4 V pp (+ 6 dBu)
Line output	775 mV RMS (0 dBu)
Priority control	24 Vdc, max 500 mA
Pass pilot control	24 Vdc, max 100 mA, 2 ~ 15 s
Power supply	24 Vdc
Consumption	90 mA



ME-F45L » XLR · switch · light ring

Microphone with gooseneck and XLR connector. With on-off switch and luminous ring to indicate that it is in operation. Suitable for conferences, meeting rooms, worship places...

Capsule type	electret
Power supply	phantom 9 ~ 52 V
Directability	supercardioid
Output impedance	200 Ω, balanced
Frequency response	80 ~ 15,000 Hz
Sensitivity	-40 dB (10 mV/Pa)
Connection	XLR



ME-F45D » XLR · 1 KΩ — ME-F40A » XLR · 200 Ω

Pencil type microphone mounted on flexible gooseneck with XLR connector to insert in a base. Suitable for conferences, conventions, meeting rooms, etc.



	ME-F45D	ME-F40A
Capsule type	electret	electret
Power supply	phantom 9 ~ 52 V	phantom 48 V
Directability	cardioid one-way	cardioid
Output impedance	1,000 Ω, balanced	200 Ω, balanced
Frequency response	150 ~ 16,000 Hz	40 ~ 16,000 Hz
Sensitivity	output- 30 dB	output - 40 dB
Connection	XLR	XLR
Dimensions (mm)	capsule Ø 8 x 25, flex 450	capsule Ø 13,6 x 45, flex ~ 400
Finish	black metal	black metal

MICROPHONES

Microphones for different applications

DM-10DS » hand-held · cardioid

Hand-held microphone for general PA applications; announcements, conferences, speeches... With metal body and start switch.

Capsule type	dynamic
Directability	hyper cardioid
Output impedance	250 Ω, balanced
Frequency response	50 ~ 16,500 Hz
Sensitivity	- 77 dB
Controls	start-stop switch
Dimensions (mm)	Ø 48,4, longitud 195
Connection	XLR
Finish	matt grey steel



2694M » wall · with inhibition system

A microphone for announcements with inhibition system if several are working on the same loudspeaker zone (habitual in medical clinics), and “pilot pass output” function with adjustable timing. Suitable, for instance, in managing announcements in waiting rooms.

Switched channels	1 stereo or 2 mono
Frequency response	200 ~ 15,000 Hz
Nominal audio output	4.4 V pp (+ 6 dBu)
Line output	775 mV RMS (0 dBu)
Priority control	24 Vdc, max 500 mA
Pass pilot control	24 Vdc, max 100 mA, 2 ~ 15 s
Power supply	24 Vdc
Consumption	90 mA



ME-PS1 | ME-PS2 » for supervision · flush | in box

Microphones designed to capture, monitoring or recording audio in situations and areas where their concealed installation is required. They are used in audience halls of courts and prisons, conference podiums and town councils, control panels in security rooms, controlled access areas, pulpits of religious services

Type	electret omnidirectional
Signal-to-noise ratio	59 dB
Output signal	600 Ω, balanced
Output nominal level	selectable -60 / -30 / 0 dB
Output connector	RJ-45 (audio, control, 24 V CC)
Power supply	24 V CC through RJ-45
Consumption	60 mA
LED indicator	blue LED “talk”
Complements	power supply, cable mini jack - mini - jack, PC-ADAPTER



Special manufacturing products. Their appearance may vary. Contact us if you want more information.

MICROPHONES

Wireless microphones

MI-MMU16 » hand-held — **MI-MSU16 »** levalier
MI-MDU16 » headset — **MI-MAU16 »** aerobic

Wireless microphone system in UHF band, with diversity, selection of up to 16 frequencies and remotely configurable from the receiver with ultrasounds and the REMOSET pairing system.

- Frequency band :823 ~ 832 MHz and 863 ~ 865 MHz.
- Automatic configuration.
- Display on transmitters and receivers.
- No interference with 4G.
- Up to 15 simultaneous microphones.
- Receptors of 1 and 2 channels with diversity.

MI-MMU16

Wireless handheld microphone with cardioid polar diagram and possibility of configuration from the equipment itself.



MI-MSU16

Lavalier microphone with cardioid polar diagram, lightweight and small size for minimum visibility. Includes a clip to hold the microphone in tie or lapel.



MI-MCU16

Unidirectional condenser stage headset wireless microphone, lightweight for freedom of movement and great comfort thanks to its ergonomic design.



MI-PMU16 » microphone desk

Microphone desk with flexible gooseneck & transmitter in the base for cable-free use as a wireless microphone.



ACCESSORIES

- UB-900** Wall antenna
- UA-900** Antenna signal distributor
- MI-CH2** Cargador de micrófonos

MI-RD2CU16 » 2 channels receiver — MI-RD1CU16 » 1 channel receiver

Receivers of wireless microphones of one or two channels and with the possibility of automatically configuring and synchronizing the microphones, matching the frequencies, with ultrasounds (REMOSET system).

Frequency Oscillation	phase-locked loop (PLL)
Remote set	ultrasonic
Diversity	antenna diversity
Bandwidth	2 MHz
Signal / Noise Ratio	> 105 dB
THD	< 0.6 % @ 1 kHz
Receiving Sensitivity	-95 dBm, S/N > 80 dB
Frequency Response	50 Hz ~ 16 kHz ± 2 dB
Antenna	1/2" BNC detachable, DC 12 ~ 15 V / 100 mA
Audio Frequency Output Level	XLR balanced, -4 dBV (line) / -24 dBV (MIC)
Impedance	jack 6,35 mm unbalanced, -10 dBV
Output Port	600 Ω
Power Supply	12 ~ 15 Vdc (power supply included)
Dimensions (mm)	212,3 x 38,3 x 144



MI-RD2CU16



MI-RD1CU16

DISTRIBUTED AUDIO

Central units

K811U2 » central 1 channel / 10 controls
K814U2 » central 4 channels / 10 controls
K814U6 » central 4 channels / 20 controls

Units for connecting the general sound sources, musical program distribution and power supply of the controls. With automatic gain control and energy use over 80%



Power supply	230 Vac
Consumption at rest	5.17 W
Consumption (6 controls)	14.96 W
Efficiency	78 ~ 82%
Power supply output	12 Vdc / 2.1 A
External socket base	230 Vac / 500 W
Dimensions (mm)	235 x 155 x 81
Finish	ABS/Zamack

- Audio input (connector 2 x RCA)
- Audio level indicators
- Automatic gain control
- Socket base for connecting and controlling musical sources.



K835D » Power supply

Power supply source for connecting an additional 20 controls.

K828E » Evacuation and alarm interface

A module for announcements from an external system to be broadcast as a priority through all of the loudspeakers of the distributed audio system.



K810A » Microphone zone desk

Microphone desk for live announcements and to send them to loudspeakers of the dSOUND system.



With selective and general call, keyboard, LCD display and microphone with flexible gooseneck.

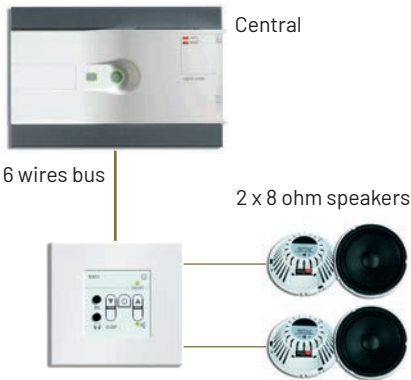
DISTRIBUTED AUDIO

Controls

K801 » 1 channel · stereo



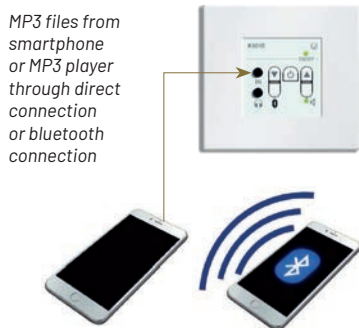
- Input 1 stereo channel
- Output 1.5 W + 1.5 W (8 ohm)
- Auxiliary audio input
- Headphone output
- Digital volume control (31 steps)
- Last volume memory
- Priority of messages
- "do not disturb" function
- Programmable disconnection time up



K801B » 1 channel · stereo · bluetooth



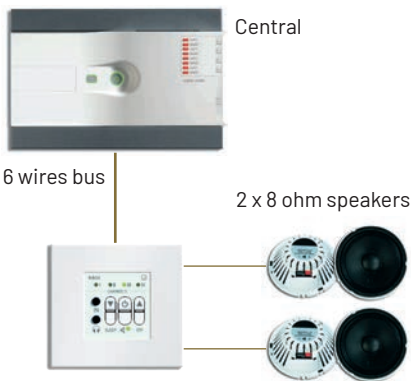
- Input 1 stereo channel
- Output 1.5 W + 1.5 W (8 ohm)
- Bluetooth connection
- Auxiliary audio input
- Headphone output
- Digital volume control (31 steps)
- Last volume memory
- Priority of messages
- "do not disturb" function
- Programmable disconnection time up



K804 » 4 channels · mono



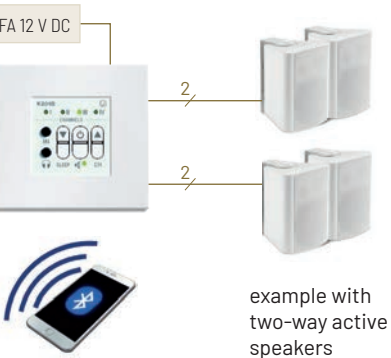
- Input 4 mono channels
- Output 1.5 W + 1.5 W (8 ohm)
- Auxiliary audio input
- Headphone output
- Digital volume control (31 steps)
- Last volume memory
- Priority of messages
- "do not disturb" function
- Programmable disconnection time up



K804B » 4 channels · mono · bluetooth



- Input 4 mono channels
- Output 1.5 W + 1.5 W (8 ohm)
- Bluetooth connection
- Auxiliary audio input
- Headphone output
- Digital volume control (31 steps)
- Last volume memory
- Priority of messages
- "do not disturb" function
- Programmable disconnection time up



The control modules are supplied without the frames. In the images they are combined with the K861W frame.

DISTRIBUTED AUDIO

Speakers

K855A | K855 » 5" · 15 W · active | passive

By combining passive and active loudspeakers (self-amplified) the possibilities of distributed audio installations are increased. The amplifier in each active loudspeaker supplies up to five passive loudspeakers.



Speaker (K855/K855A)	
Loudspeaker	5"
RMS power	15 W
Frequency response	90 ~ 19,000 Hz
Dimensions	Ø 132 mm x depth 56 mm
Amplifier (K855A)	
RMS power	10 + 10 W stereo, 20 W mono
Output impedance	2 Ω
Capacity	3 right channel loudspeakers 2 left channel loudspeakers
Accessories	
Grille	K875W
Box for flush installation	K885
Spring hooks	K885M ⁽¹⁾

⁽¹⁾ Special fixing system for plaster and false ceilings.



K875W

ABS grille, Ø 185 mm and 9 mm thick.
Hole for flush installation Ø 150 mm

K853AL » 3.5" · 10 W

3.5" flush mount ceiling loudspeaker, with 10 W power and aluminium grille, designed for the reproduction of music and voice in the interior of residences, hotels, lounges, offices, schools, etc.

Loudspeaker	3,5"
RMS power	10 W
Frequency response	125 ~ 18.000 Hz
Dimensions	Ø 120 mm, depth 58 mm
Installation hole	Ø 105 mm
Finish	ABS & aluminium grille



K842 » amplifier

10 + 10 W (stereo) or 20 W (mono)



K844 » amplifier

20 + 20 W (stereo) or 40 W (mono)



Please contact us for other options or customizations depending on the project. Our technical-commercial department is at your disposal to study the needs of your installation and advise you on the best solution.

PUBLIC ADDRESS RACKS

OPTIMUS supplies the rack cabinets with the public address systems assembled, wired, verified and with the specific technical documentation for your installation.

AR-12K » 12 u – AR-18K » 18 u – AR-27K » 27 u – AR-37K » 37 u – AR-42K » 42 u

Furniture for housing the elements of the PA units with a standard width of 19", 800 mm in depth and height as needed (12, 18, 27, 37 and 42 units). They incorporate wheels, practicable side panels, rear panel with key, top fans and optionally a tempered glass front door with key.

	AR-12K	AR-18K	AR-27K	AR-37K	AR-42K
Height units	12	18	27	37	42
Interior width	488 mm (19")	488 mm (19")	488 mm (19")	488 mm (19")	488 mm (19")
Exterior dimensions					
Width (mm)	600	600	600	600	600
Depth (mm)	800	800	800	800	800
Height (mm)	720	985	1385	1830	2055
Ventilation	4 fans	4 fans	4 fans	4 fans	4 fans
Wheels	incorporated	incorporated	incorporated	incorporated	incorporated
Front door (optional)	PK-12	PK-18	PK-27	PK-37	PK-42



OPTIMUS has a wide range of accessories to configure the rack of the public address system for your installation: switch modules, thermomagnetic, battery disconnect key, volume control, monitor speaker, channel selector ...We also have all the mechanical and electrical elements necessary to install their equipment, from mounting brackets & blank panels to patch panels for the rack wiring.

There are 18, 27, 37 and 42 unit height versions for Public Address & Voice Alarm COMPACT systems, as well as the required accessories for an installation to comply with EN54 regulations (differential switches, sockets, line speaker protection, Ethernet, power filters...). **Consult with us to carry out the study according to your installation.**



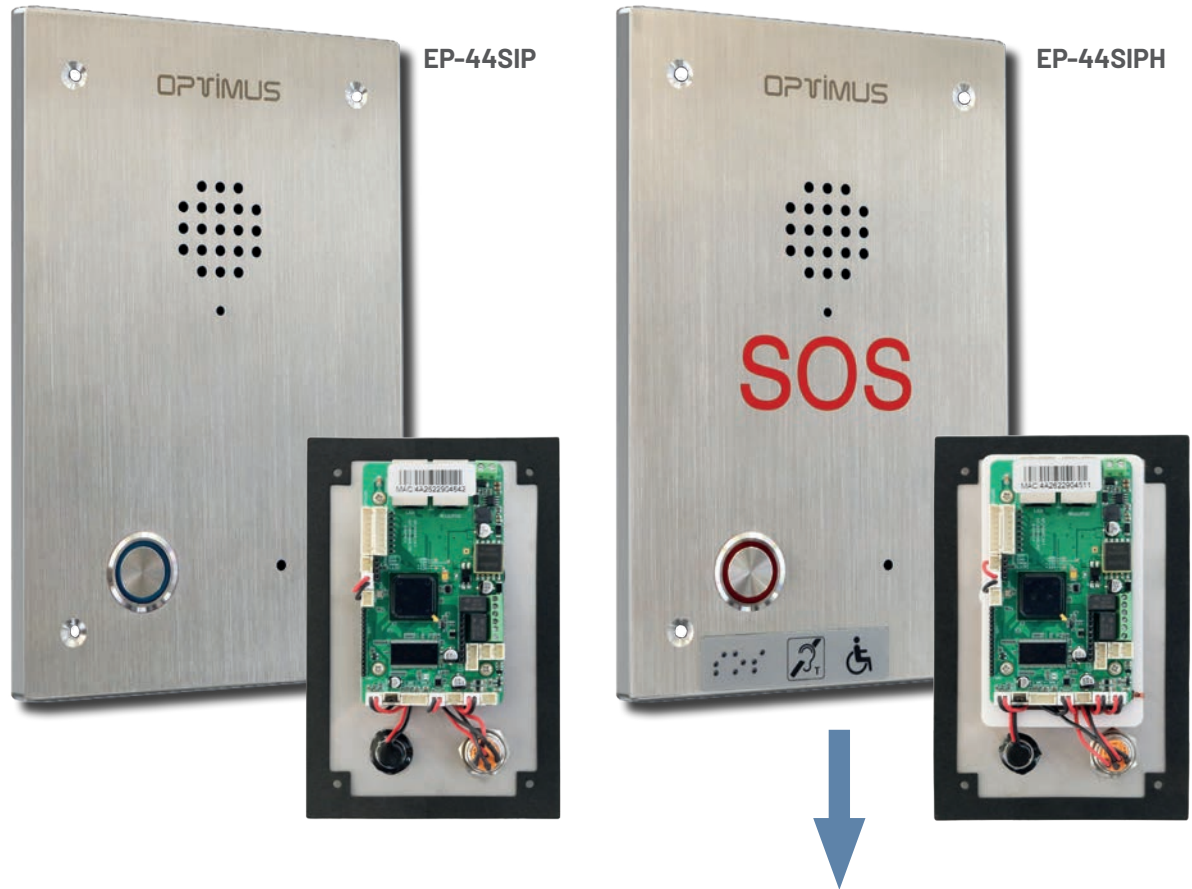
SIP INTERCOMMUNICATION

Intercommunicators

EP-44SIP | EP-44SIPH

Vandal-resistant weatherproof intercommunicator with SIP protocol, full duplex two-way audio, echo cancellation, noise reduction, web server, metal call button, active call indicator led, two configurable contacts (relay outputs) for door opening, open communication signalling, call in progress, integration with other systems (security, alarm, CCTV)... IK10 anti-vandal protection and IP65 weather protection using the CE-EP embedding box. 12 Vdc or PoE power supply.

Both models can be integrated with third parties via HTTP/JSON in installations with an IP PBX server (IP-PBX). They are, therefore, compatible with industrial control and automation tools (SCADA), widely used in data collection, supervision, control and analysis through computer applications.



- Special model for emergency call points, such as those installed in the refuge areas, (CTE DB SI - an. A), with:
- Induction loop.
 - Large SOS letters in red.
 - Pre-recorded message for call in progress.
 - Accessibility pictogram.
 - CALL word in braille.

EK-30SIP

SIP intercom electronic board in metallic box, with speaker, microphone and push-button, to integrate into ATMs, elevators, barriers...



SIP INTERCOMMUNICATION

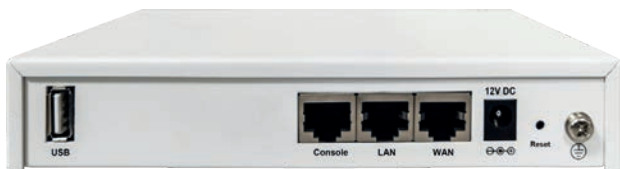
SIP servers

T-100S » 100 extensions – T-600 » 600 extensions

Servers enhance the performance of intercom and PA interfaces and allow to configure systems with additional functions to those based on point to point p2p.

Among other features, servers allow audio recording, use of generic SIP smartphone applications, running behind a NAT (in different networks without VPN), sequential call, multiple call, call paging, use of generic SIP smartphone applications (simultaneous audio) simplex and duplex...

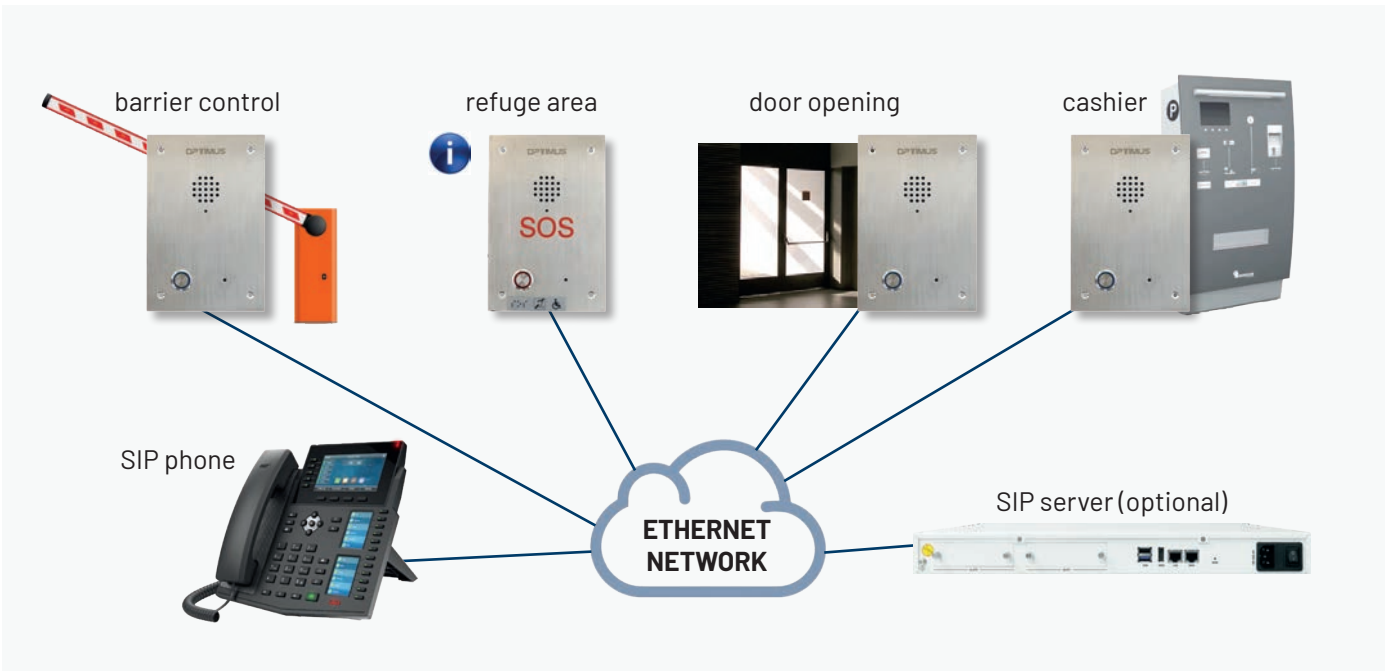
- 100 / 600 extensions.
- 50 / 150 I concurrent calls.
- Opus and G.722 high-quality audio codecs
- Web Server
- No license fee



T100S | 100 extensions | 50 concurrent calls



T-600 | 600 extensions | 150 concurrent calls | expandable



SIP INTERCOMMUNICATION

Special intercoms

In addition to the EP-44SIP models, for general use, and EP-44SIPH, suitable for help/information points and refuge areas, OPTIMUS has a wide variety of SIP intercoms for industry, healthcare, explosion-proof (ATEX)... and in a wide variety of formats.



Consult with us to find the best solution for your needs

SIP intercom centers

SIP intercoms can be accessed from SIP phones within the installation, without the need for specific or additional equipment. If a specific centralization is required, OPTIMUS' offerings range from simple SIP phones to sophisticated control consoles with touchscreen displays and extensive capabilities.



Consult with us to find the best solution for your needs

SIP NURSE CALL SYSTEM

SMCi - IP



Nurse call system that uses LAN technology to efficiently and effectively connect all system units, improving management in hospital, clinic, and residential environments. The system stands out for its user-friendly interface, featuring a color touchscreen at the nursing control station and intuitive room terminals for both patients and healthcare staff.

Among its numerous features, it is worth highlighting its ability to store and access the incident history of the healthcare facility, its integration with management systems based on SQL databases, support for VoIP telephony, paging systems, and wanderer systems, as well as the ability to display call information on mobile devices.

Installation, programming, and maintenance of the system are quick and simple, with customization and software configuration options, along with continuous self-diagnosis to ensure system reliability.

Central Units and Control

MT-07IP

Nurse master station to centralize operations with room terminals and communication equipment. Its 10.4" LCD touchscreen facilitates management through the graphical interface and allows easy and quick access to all system functions. It presents calls by priority and type, as well as the presence of healthcare personnel in the rooms, and establishes audio communication with the rooms. Powered at 12V DC / 2A with AT12V (not included).



PS-07IP

Nurse-call system server and power supply for 100 room terminals. It includes a VoIP Registration server responsible for assigning audio channels and directing them to the terminals registered in the system. Prepared to be placed in a 19" rack (3 u).

SQLS

SQL server to operate with data related to the history of system events. Its basic function is the storage of all the incidents of the system, including the type of call and registration of the personnel in the room at the time of the event. The information can be viewed from the SW-SQLHV software and exported to multiple formats. Dimensions 170 x 150 x 65 mm, prepared for standard 19" rack (occupies 1 unit).



SIP NURSE CALL SYSTEM

Terminales de habitación

The RT-07 room terminals have large keys with different colors and LED lighting. Pressing any key generates optical and acoustic information in the control terminals and signaling elements (corridor lamp, information screens, other rooms...) facilitating a quick response. They also centralize the connection of room mechanisms, such as bed controls, buttons for different types of calls, presence/cancellation buttons, bathroom pull cords, corridor lamps and external devices such as drippers or medical device alarms. They are PoE powered.

RT-07IP

- Normal call, emergency call, doctor call (code blue), presence of healthcare personnel and call cancellation.



RT-07VIP | RT-07CRIP

- Hands-free audio communication with the nurse's station.
- Normal call, emergency call, doctor call (code blue), presence of healthcare personnel and call cancellation.
- The RT07-CRIP model incorporates an internal RFID reader for alarm management.



RT-07DIP | RT-07DCR

- With display and hands-free audio communication with the nurse's station
- Normal call, emergency call, doctor call (code blue), presence of healthcare personnel and call cancellation.
- The RT07-DCR model incorporates an internal RFID reader for alarm management.



With the presence of healthcare personnel activated, the display shows calls from other rooms, indicating the type and origin of the call, and allowing communication between rooms. This feature allows the equipment to be used in nursing or medical stations.

RT-07WRIP | RT-07WRCRIP

- Hands-free audio communication with the nurse's station.
- Normal call, emergency call, doctor call (code blue), presence of healthcare personnel and call cancellation.
- The RT07-WRCRIP model incorporates an internal RFID reader for alarm management.
- Includes a wireless RF receiver for patient bracelets and pendants.



SIP NURSE CALL SYSTEM

Handheld call units

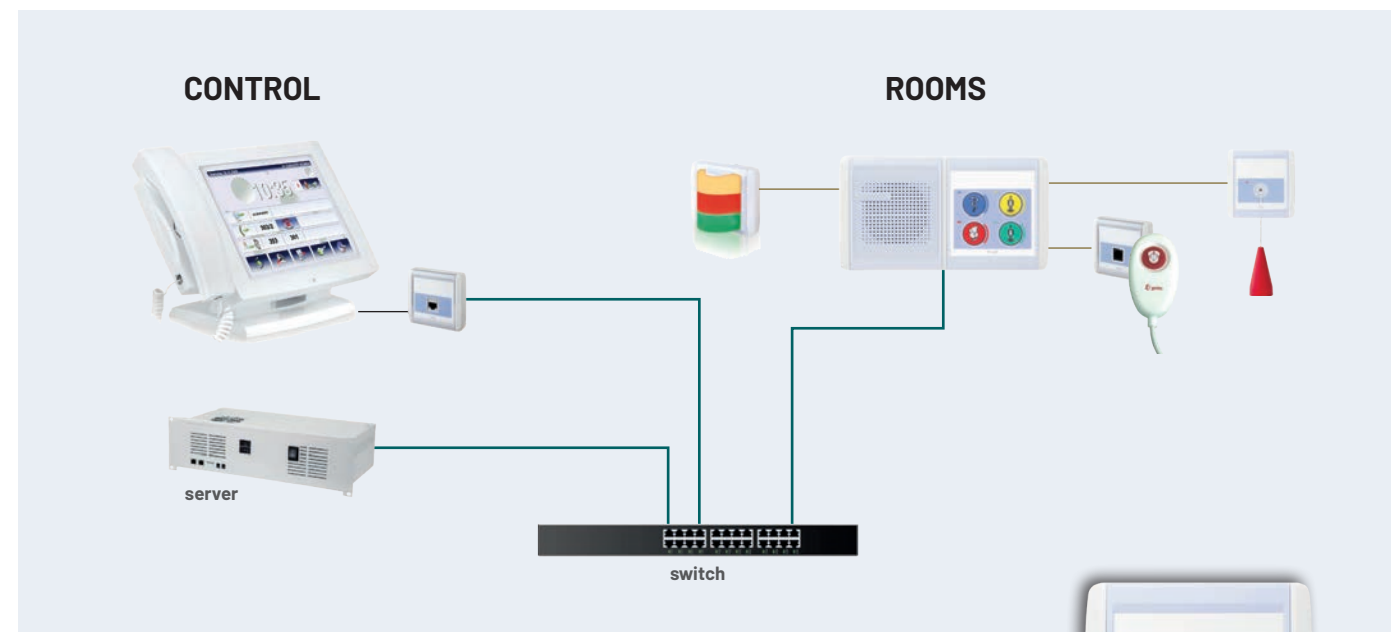
PU-07S

Handheld call module with a big red button to make a normal call and reassurance LED. Monitored by the system in case of disconnection. Equipped with a fastening system and has an IP66 protection rating. Made of hypoallergenic material, white color. RJ12 connector.



PU-07LSIP

Soft-touch handheld call module with easy-grip ergonomic design. It has a big red button to make a normal call, two buttons to control the lighting and reassurance LEDs.



Bath call module

EC-07IP

Mechanism to install in the room, usually in the bathroom, with a pull cord. It is protected against water, with waterproof electronics and submersible in liquids.



SIP NURSE CALL SYSTEM

Corridor lamp

CL

Mechanism to install in the room, usually in the corridor, near the entrance door, with three lamps to signal normal call (red), presence (green) and bathroom call (yellow). It also signals other situations (code blue, emergency call, request for help...) with combinations between lamps and fixed or flashing lighting.



Wireless call and wandering detection

WB2 / WB2G

Wireless call module with battery level control. Range of approximately 35 m. It can be placed as a bracelet or hung around the neck. Thermoplastic material, antibacterial, with IP65 protection against dust and water. Dimensions 40 x 53 x 12 mm. Weight 80g.

WB2G model has fall control and an identification and location transmitter within the activation range of the GT1 passage zone detector.



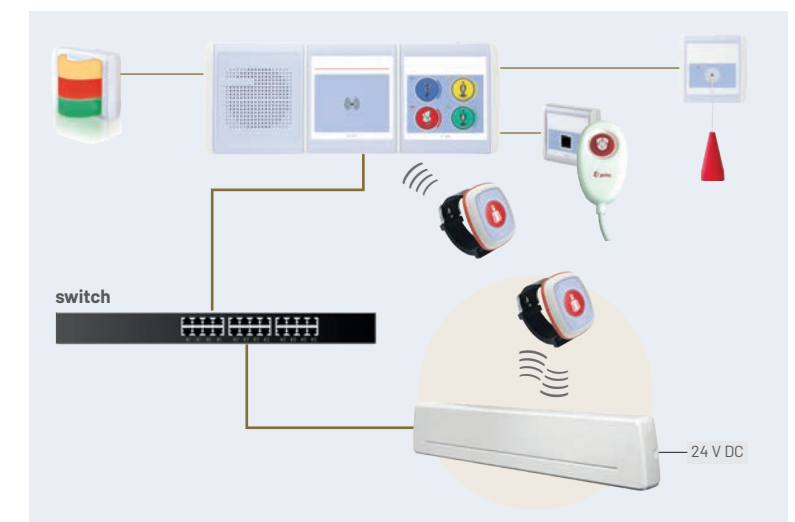
GT1

Transmitter for passage door or supervised area to control wanderers and runaways. It sends the system a signal when a person with a WB2G enters its detection area, providing location and identification information. The range is 5 m, expandable if synchronized with another GT1.



WR-T1M

Module for centralized reception of signals from wireless pushbuttons. It can also function as a signal repeater, expanding the system's wireless coverage range.



The nurse-call system has more elements that cover any need of the healthcare center, both room terminals and call and signalling mechanisms. It also has multiple integration possibilities with third parties, such as telephony or music distribution. Please consult with us about the needs of your installation.

WIRELESS NURSE CALL SYSTEM

RF Call Mechanisms

SMCi – RF 

RF-MLC

Mechanism with call, presence, cancellation and bed control with call. Includes wall mount and 180 cm cable.



RF-ML

Mechanism with call, presence and cancellation.



RF-MLB

Mechanism with call, presence, and cancellation. Includes pull cord, suitable for bathrooms.



RF-PTRA

Call bracelet. IP67 protection rating.



RF-CLFA

LED lamp with three colors for signaling calls, with acoustic warning.



RF-PREC

Call reception bracelet. LCD screen, vibration and buzz. Control of up to 99 transmitters. Protection index IP67.



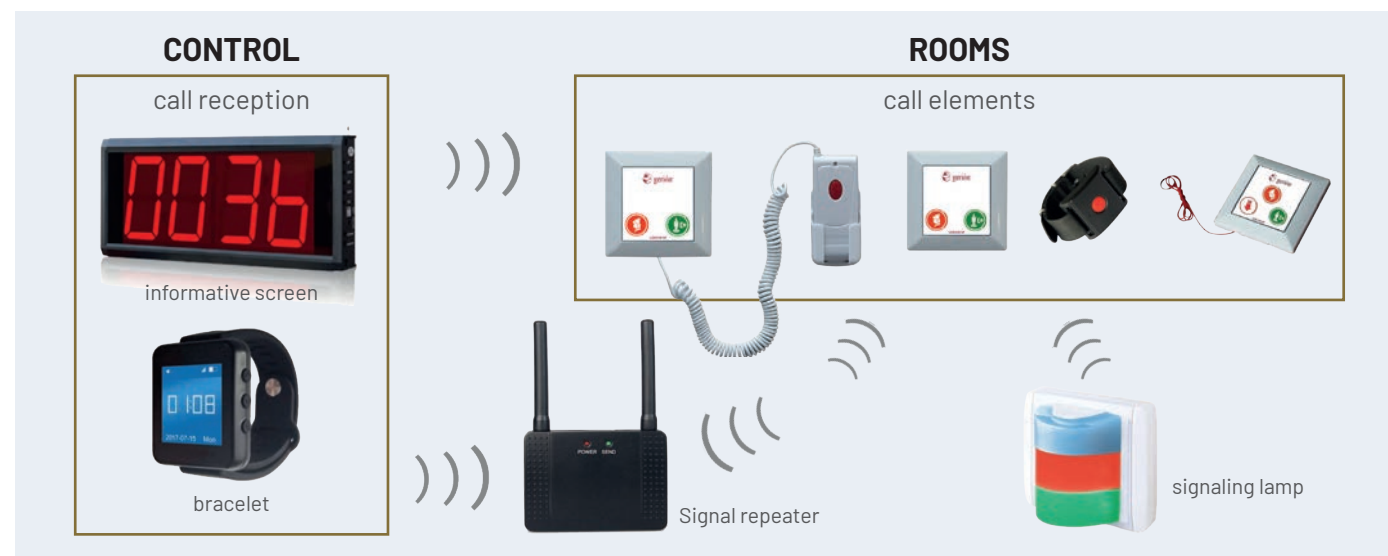
RF-DLDC

Receiver display for incidences with a speaker. Fixed or cyclical presentation, with adjustable display time. Dimensions 410 x 158 x 45 mm. Installation on wall or ceiling.



RF-REP

Wireless repeater. Reception radius of up to 200 meters in open space.



SMC SYSTEM

Intercommunication and signalling system for health, industry, commerce or education. Its different elements can be combined in the same installation, so that, from the control centres, communication is established with hospitalized patients, entrances and accesses are controlled and doors are opened. Installation is as simple as connecting all the elements to a single five-wire cable (SMC bus).

Control

CC-123F » signaling and audio

A control central for receiving incidents of the SMC system, dealing with them and communicating with the call points.



signalling & intercommunication

CC-119F » signaling

Control central with signalling only to receive the incidents of the SMC system.



signalling

- Reception of calls and presence, identifying origin and type.
- Display presentation of all calls pending ordered by priority.
- Transfer of selective control to four possible receiver centres.
- Simultaneous attention of calls and presence along with other centrals.
- Connection for programming names of intercommunicators from the computer.
- Indicators of status and type of call.
- External call signalling.

MT-DA » transfer control module

A transfer control module for systems with several centrals and with control transfers between them. It has one input and four outputs, electrically isolated and with regenerated data.



SC-BUS » isolator control module

Control module to electrically sectorise and isolate the communications bus, to separate different sections of connection and avoid the propagation of errors or breakdowns.



Intercommunicators - hospitals, clinics and residences

TH-03F » multifunction intercommunicator with display

TH-02F » multifunction intercommunicator

A multifunction intercommunicator with the possibility of establishing all kinds of call and presence with the central, communicating with it and with other intercommunicators. Suitable for rooms in hospitals, clinics and residences. The two models can make a connection with the intercommunicator that has produced the most priority call. The TH-03F includes a small display that shows the origin and type of the call.



Power supply	24 Vdc
Central connection	5-line SMC bus
Local connection buttons	2 x 0.5 mm2, max. 20 m
Local connection lamps	3 x 0.5 mm2, max. 20 m
Loudspeaker	8 Ohm, 4 W maximum
Dimensions (mm)	230 x 140 x 10
Finish	ABS, ivory colour
Box for flush installation	2010M model
Surface box	CAJ-TH model

AM-1F | U-AM » audio module

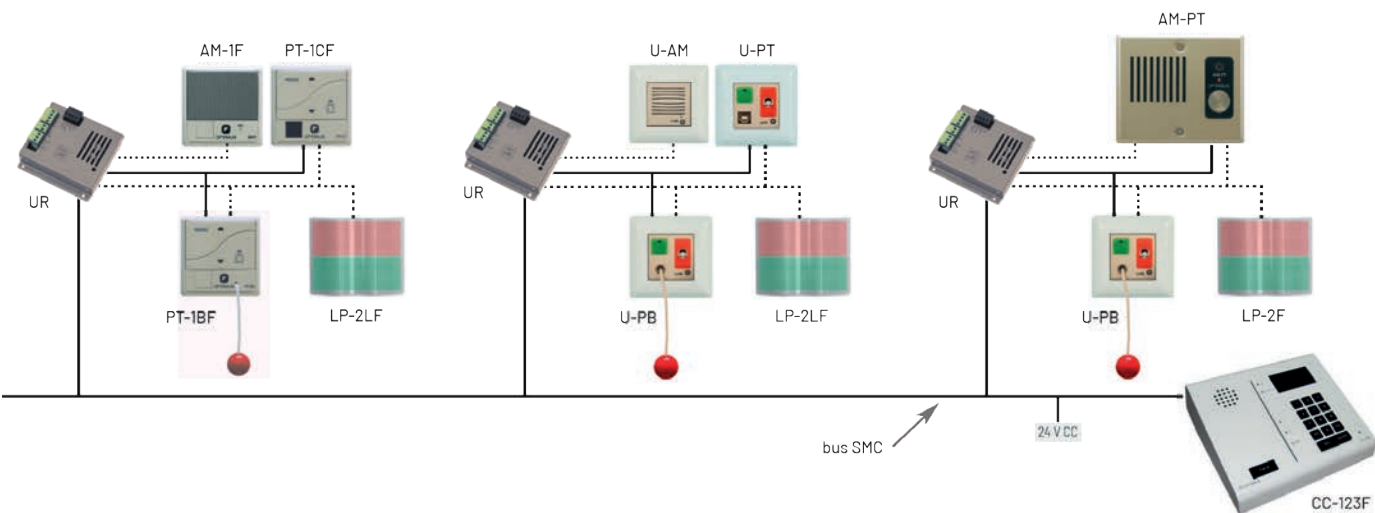
Communication modules with loudspeaker and microphone to make an audio connection through the UR control units.



With built-in frame.



For universal box, it does not include a frame.

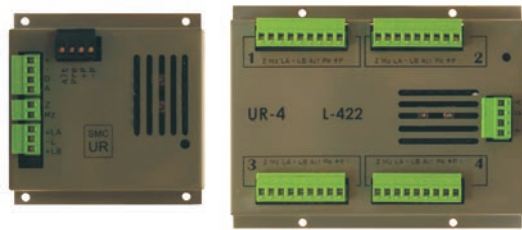


Remote control units

UR » 1 call zone with audio

UR-4 » 4 call zones with audio

Control electronics that establishes communication of audio + data between the centrals, the call and signalling devices of the system and the audio modules, with amplification and transmission volume adjustment from the central. Models available to control a series of mechanisms (a room) or four units (four rooms).



	UR	UR-4	UC-S	UC-4S
Power supply	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Consumption (rest/max.)	25 mA/230 mA	45 mA/230 mA	25 mA/200 mA	45 mA/200 mA
Capacity	1 set of devices	4 sets of devices	1 set of devices	4 sets of devices
Central connection	5-line SMC bus	5-line SMC bus	3-line SMC bus	3-line SMC bus
Local connection buttons	2 x 0.5 mm2, max. 20 m	2 x 0.5 mm2, max. 20 m	2 x 0.5 mm2, max. 20 m	2 x 0.5 mm2, max. 20 m
Local connection lamps	3 x 0.5 mm2, max. 20 m	3 x 0.5 mm2, max. 20 m	3 x 0.5 mm2, max. 20 m	3 x 0.5 mm2, max. 20 m
Local audio connection	4 x 0.5 mm2 + display, (20 m)	4 x 0.5 mm2 + display, (20 m)	-	-
Dimensions (mm)	102 x 102 x 23	165 x 120 x 23	102 x 102 x 23	165 x 120 x 23
Finish	grey metal	grey metal	black metal	black metal

Calling modules

ML-P | ML-F | U-ML

Handheld call controls for patients, with 1.9 m cable and RJ45 or USB connector.



ML-P
With RJ45 connector, for PT-1CF.

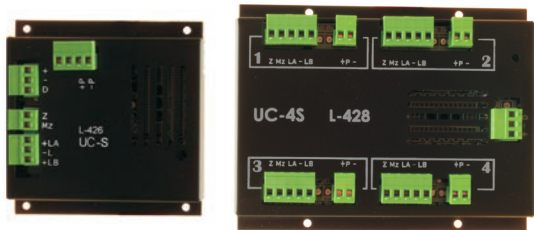


ML-F | U-ML
With call in progress LED and two buttons to activate lights
• ML-F, with RJ45 connector, for PT-1CF.
• U-ML, with USB connector, for U-PT.

UC-S » 1 call zone

UC-4S » 4 call zones

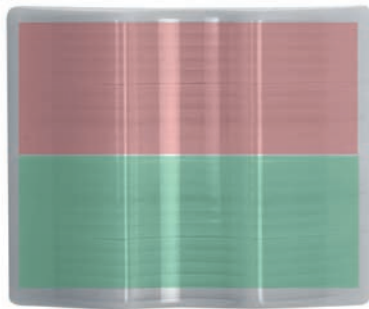
Control electronics that establishes data communication between the centrals and the different system call devices and signalling. Models available to control a series of mechanisms (a room) or four units (four rooms).



Corridor light

LP-2LF

Light to signal the state of the calls and presences generated by the devices and intercoms in the room.



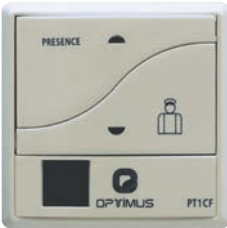
SMC SYSTEM

Mechanisms for signalling & call

Signalling and call mechanisms for flush mounting and signalling of call to the centres. They are connected to a remote unit (UR or UC series) or to a TH-02F/TH-03F intercommunicator to complete the equipment of the call points.

PT-1CF | U-PT » call button

With presence and normal call buttons, call in progress and active presence LEDs, possibility of making an emergency call, and connector for calling modules.



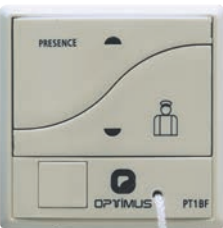
With built-in frame and RJ45 connector, for ML-F or ML-P.



For universal box, it does not include a frame. With USB connector, for U-ML. It has a disconnected control warning.

PT-1BF | U-PB » bathroom pull cord

With presence and normal call buttons, pull cord for emergency call, call in progress and active presence LEDs, and the possibility of making an emergency call.



With built-in frame.



For universal box, it does not include a frame.



For universal box, it does not include a frame.

U-PBI » bathroom pull cord, IP65

With pull cord for emergency call and anti-humidity protection.



U-PM » metal call button

With configurable call button, normal or emergency, or presence and LEDs for call in progress and active presence. Totally metallic, both structure and button. For universal box

SMC SYSTEM

Intercommunicators

EP-405 | EP-405H » anti-vandal

Weatherproof vandal intercom with a robust 3 mm thick metal front, mylar speaker (moisture resistant) and protected by an interior metal grill, antivandal metal call button, torx security screws and protection against dust and water.



Special model for emergency call points, such as those installed in the refuge areas, (CTE DB SI - an. A), with:

- Large SOS letters in red.
- Pre-recorded message for call in progress.
- Accessibility pictogram.
- CALL word in braille.

Power supply	24 Vdc
Consumption (rest/max.)	25 mA / 230 mA
Central connection	5-line SMC bus
Door opening connection	2 x 0.5 mm2, max. 20 m
Loudspeaker	2,5" mylar, 16 Ω
Dimensions (mm)	123 x 186 x 3,0 (flush)
Finish	stainless steel
Box for flush installation	CE-EP model
Surface box	CS-EP model
Relay (optional)	U-RY

SAM-M | AM-PT

An intercommunicator with front plate and stainless steel call button, allen screws, one-way high sensitivity microphone and damp-proof loudspeaker.



SAM-M

With built-in UR. It connects directly to the SMC bus.



AM-PT

Connects to UR series control units.

	SAM-M	AM-PT
Power supply	24 Vdc	via UR/UR-4
Consumption (rest/max.)	25 mA/230 mA	-
Central connection	5-line SMC bus	via UR/UR-4
Door opening connection	2 x 0.5 mm2, max. 20 m	via UR/UR-4
Loudspeaker	2.5" mylar, 16 Ω	2.5" mylar, 16 Ω
Dimensions (mm)	128 x 110 x 5 (flush)	128 x 110 x 5 (flush)
Finish	stainless steel	stainless steel
Box for flush installation	CAJ-24206 model	CAJ-24206 model
Surface box	CAJ-SAM model	CAJ-SAM model
Relay (optional)	U-RY	U-RYY



SAM-M2 » integration kit

Also available as a kit (SAM-M2) for integration in lifts, payment machines, cashpoints, barriers...



SIGNALLING FOR ACCESSIBLE BATHROOMS

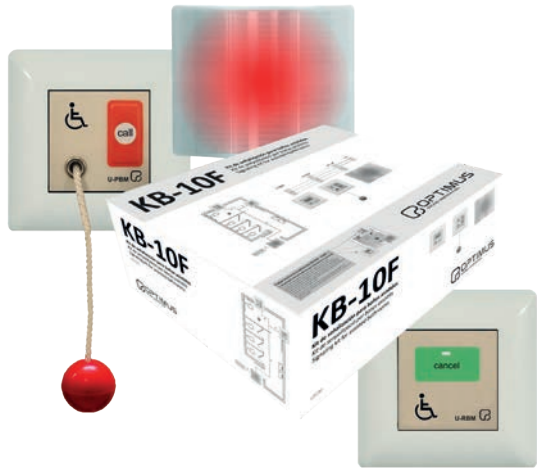
Kit compatible with the SMC system

KB-10F

A set of devices for equipping assisted baths as per the Building Technical Code (CTE - DB SUA - SUA3), to give assisted baths a call system that allows users to know that their call has been received with acoustic and light signalling in a control centre or a place they frequently pass.

KB-10F and SMC

The KB-10F kits can be connected to an SMC intercommunication and signaling system installed in a hospital or nursing home. The UC-LP unit behaves as one of the remote control units of the UC / UR series and signals the call in the SMC system control centrals.



CC-40F

Acoustic and luminous signalling module, to receive calls from up to four assisted toilets. With four LEDs that light up indicating the origin of the call. A MUTE button allows the call to be silenced while it is being attended to and cancels locally in the bathroom.



KB-BAT

Power supply with two 12 V DC 5 Ah batteries for uninterrupted 24 V DC supply.

It keeps the equipment on stand-by operational for 24 hours and in operation for 30 minutes.

- One KB-BAT powers up to:
- 7 x KB-10F
- 4 x KB-10F + 1 x CC-40F



Stand alone kit

KB-05

Set of call and signalling mechanisms for assisted bathrooms, according to CTE DB SU - SUA3. Includes call mechanism by pull cord, call reset mechanism, a central unit with acoustic and light signalling, white frames and power supply.



RF-KB » inalámbrico RF

Set of call button with pull cord and signaling lamp, both wireless via RF. Designed for equipping assisted baths as per the Building Technical Code (CTE - DB SUA - SUA3), to give assisted baths a call system that allows users to know that their call has been received with acoustic and light signalling in a control centre or a place they frequently pass.

INTERCOMMUNICATION

Point to point intercommunication - high power 6 W

MP-C1 » master station

MP-A1 » desktop substation

MP-A254 » ceiling substation

High power point-to-point intercom system, with intercoms of the wall / desktop type or to be embedded in the ceiling.

The power provided by the central unit (up to 6 W) generates a high SPL in the intercom and allows its use in noisy environments.



MP-C1

Desktop intercom with 6 W power output and "talk" button to control the conversation with the substation.

Power supply: 12 V DC (1 A max)
Output impedance: 8 ohm
Output power: 6 W
Dimensions: 138 x 190 x 17 mm
Weight: 0.85 kg



MP-A1

Desktop intercom with call pushbutton.

Power: 6 W
Dimensions: 138 x 190 x 17 mm
Weight: 0.81 kg

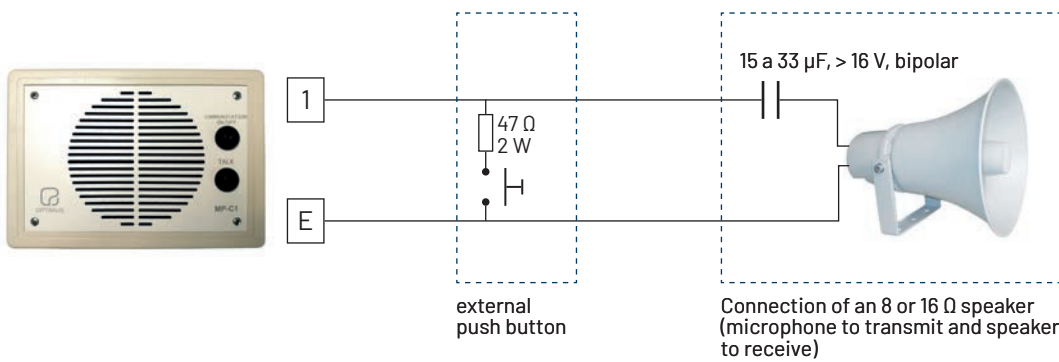


MP-A254

Ceiling speaker with intercom functions.

Power: 6 W
Dimensions: Ø 150 x 52 mm
Mounting hole: Ø 120 mm
Weight: 0.35 kg

Connection with 8 Ω speaker



INTERCOMMUNICATION

Intercom for windows and counters

SIV-50

Hands-free intercom system for immediate and simplified installation that solves communication between two people in a clean, safe and flexible way. Designed to be installed in protective screens, customer service windows, lockers, cashiers, medical offices, duty pharmacies...



The equipment allows natural and fluid communication out loud, without raising your voice and totally hands-free. The microphone incorporates acoustic echo cancellation (AEC) and noise reduction to improve speech intelligibility. Volume control makes final adjustment easy at the time of installation.

The units have an IP 33 degree of protection, are small in size (108 x 90 x 24 mm), can be attached to the partition in a moment using the built-in self-adhesive, and are quickly connected with the included cables. Also included is the 12V DC power supply.

SIV-40

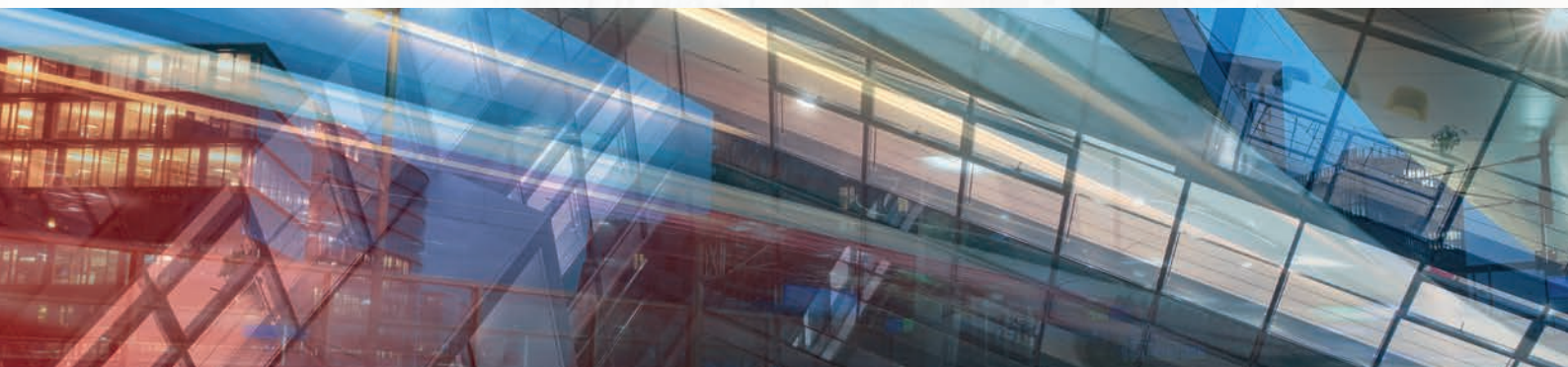
Set of microphone desk with speaker (inside), microphone and speaker (outside), for the intercom function of closed booths or counters with protection screens. Suitable for transport & shows ticket sales, and the attention to the public in any situation: shops, businesses, administration, banking ...

- Control of the communication.
- Audio level adjustment.
- Hands free conversation on both sides.
- Half-duplex also available (e.g. noise case).
- Quick installation and immediate start-up.
- Recording and/or supervision of the conversation.



INDEX

2693	58	C-1360	56	IF-PIA4	12	MP-xxxWF2	33	UB-900	60
2694M	59	C-1480	56	IT-100	26	MP-xxxWF2DC	33	UC-4S	75
A-223DEN	47	C500-BGM	28	JE-303ASW	40	MT-07IP	68	UC-S	75
A-225DEN	45	C-620A	56	K801	62	MT-DA	73	U-ML	75
A-225EN	45	C-630A	56	K801B	62	MX-12FX	24	UMX-03/O	19
A-2250EN	51	C-640A	56	K804	62	MXD-88	22	UMX-03/OE	19
A-226DEN	45	C-660A	56	K804B	62	NOVA-12RM	21	UMX-2M3	10
A-226EN	45	CA-915EN	55	K810A	61	NOVA-500	20	UMX-2SA	10
A-2260EN	50	CA-915WEN	55	K811U2	61	NOVA-500S	20	UMX-C16	10
A-252BTM	46	CA-950EN	53	K814U2	61	NOVA-TM	21	UMX-EA3	10
A-254ATS	48	CA-950WEN	53	K814U6	61	NS-CAN	15	UMX-LNK	10
A-254BTC	47	CAN-AV	15	K828E	61	PJ-10	43	UMX-LNKE	10
A-255ATS	48	CC-119F	73	K835D	61	PJ-20	43	UMX-MC6	10
A-255BTM	46	CC-123F	73	K842	63	PJ-20D	43	UMX-PS	10
A-256ATS	48	CC-40F	78	K844	63	PM-2EU	25	U-PB	76
A-256BTM	46	CL	71	K853AL	63	PM-2Z	23	U-PBI	76
A-256MAC	51	COMPACT	7	K855	63	PM-4E	25	U-PM	76
A-256MHQ	51	COMPACT LITE	8	K855A	63	PM-4P	25	U-PT	76
A-257DTM	47	COMPACT LITE WALL	8	KB-05	78	PM-61M	24	UR	75
A-258BTM	46	COMPACT-E	7	KB-10F	78	PM-82S	23	UR-4	75
A-258MAC	50	COM-PAM	17	KB-BAT	78	PMV-6Z	30	WB2	71
A-258MHQ	50	COM-PCC	17	LA-100T	52	PMX-8Z	22	WB2G	71
A-258SB	49	CP30-MP3	28	LP-2LF	75	PS-07IP	68	WCM-20BT	54
A-262IP	47	CP40-MP3BT	28	LS-320	25	PS-630E	17, 21	WCM-20WT	54
AC-520W	40	CV-12 (I, B, W, S)	36	MA-120M	29	PT-1BF	76	WCS-32BT	54
AC-615T	39	CV-4 (I, B, W, S)	36	MA-215SIP	35	PT-1CF	76	WCS-32WT	54
AC-630T	39	CV-40 (I, B, W, S)	36	MA-30M	29	PU-07LSIP	70	WPD-8P	22
AC-650T	39	CV-60 (I, B, W, S)	36	MA-60M	29	PU-07S	70	WPD-SC	22
AC-730T	38	CV-P (I, B, W, S)	36	MAV-120Z6	30	RF-CLFA	72	WR-T1M	71
AC-850T	38	DA-240M4	34	MAV-240KIT	31	RF-DLDC	72		
AC-930EN	37	DA-4PM/O	16, 32	MAV-240Z6	30	RF-KB	78		
AE-15SIP	40	DA-4PM/OF2	33	MAV-500Z6	30	RF-ML	72		
AEI-12T	38	DA-500D2	16	MD-15	57	RF-MLB	72		
AEM-15T	41	DA-500D4	16	MD-18	57	RF-MLC	72		
AER-301T	41	DC-700ETH	14	MD-30C	15	RF-PREC	72		
AET-100	37	DC-700ETH/T	14	MD-30ETH	15	RF-PTRA	72		
AET-100PH	37	DC-800ETH	19	MD-30KE	15	RF-REP	72		
AET-100WH	37	DC-800ETH/T	19	MD-30R12	57	RT-07CRIP	69		
AM-1F	74	DM-10DS	59	ME-200B	7	RT-07DCR	69		
AM-PT	77	DT-700ETH	14	ME-200C	15	RT-07DIP	69		
APP-OPT1	17	DT-800ETH	19	ME-200CZ	15	RT-07IP	69		
AR-12K	64	EC-07IP	70	ME-200CZW	15	RT-07VIP	69		
AR-18K	64	EK-30SIP	65	ME-200D	11	RT-07WRCRIP	69		
AR-27K	64	EP-405	77	ME-F30SMP	17	RT-07WRIP	69		
AR-37K	64	EP-405H	77	ME-F40A	58	SAM-M	77		
AR-42K	64	EP-44SIP	65	ME-F45D	58	SAM-M2	77		
AS-226EN	48	EP44SIPH	65	ME-F45L	58	SC-BUS	73		
AT-M15SIP	49	ES-60W	41	ME-PS1	59	SCM-01	17		
AV-100	36	FR-30VA	44	ME-PS2	59	SCS-01	17		
AV-4	36	GT1	71	MI2-700ETH	13	SIV-40	80		
AV-40	36	IA-10SIP	26	MI2-800ETH	19	SIV-50	80		
AXF-240	29	IA-20SIP	26	MICH2	60	SJM-740SW	40		
BA-20BA	55	IA-24SIP	26	MI-MCU16	60	SL7-CM	17		
BS-208	52	IF-702ETH	11	MI-MMU16	60	SMM-8QM	27		
BS-208T	52	IF-704ETH	11	MI-MSU16	60	SMM-8SB	27		
BS-208W	52	IF-722ETH	11	MI-PMU16	60	SP-20D	42		
BS-208WT	52	IF-7P4/OE	12	MI-RD1CU16	60	SP-30BC	44		
BS-20WA	55	IF-7P4ETH/O	12	MI-RD2CU16	60	SP-30BR	42		
BS-30BHQ	54	IF-7WxxxDCETH	13	ML-F	75	SP-30SW	44		
BS-30WHQ	54	IF-7WxxxETH	13	ML-P	75	SP-910DEN	43		
BS-40BA	53	IF-802ETH	19	M02-700ETH	13	SP-916PEN	44		
BS-40WA	53	IF-804ETH	19	M02-800ETH	19	SP-920EN	42		
BS-60BA	53	IF-822ETH	19	MP-120D1	34	SQLS	68		
BS-60WA	53	IF-8P4/OE	19	MP-120SIP	35	T-100S	66		
BS-6A	55	IF-8P4ETH/O	19	MP-A1	79	T-600	66		
BS-6WA	55	IF-8WxxxETH	19	MP-A254	79	TH-02F	74		
BSA-215W	55	IF-C16	11	MP-C1	79	TH-03F	74		
C-1120	56	IF-MC6	11	MP-xxxWD1	12, 16, 32	UA-900	60		
C-1240	56	IF-PCT	12	MP-xxxWDC	12, 16, 32	U-AM	74		



Security



Paging



Information



Communication



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