



megaRSA

TYPE

Management and control system of main functions in nursing homes, health facilities and hospitals of any size. The user-friendly software allows for managing bed headboard and bathroom alarms, bi-directional handsfree communication between staff and patients, air conditioning/heating, access control, as well as the main technological functions of the structure.

It can be interfaced with PBX telephone systems to send alarm signalling messages to cordless telephones.

FEATURES

The system is designed to control calls from patient rooms and bathroom alarms. The integrated audio system provides full duplex handsfree communication with the patients. The control station includes a PC, a desktop microphone unit and a speaker. Local reset function, luminous door repetition of alarm/call events, with event recording and printing. The use of dedicated technological control units makes it possible to switch on luminous guides in corridors to indicate the origin of alarms/calls.



MI503



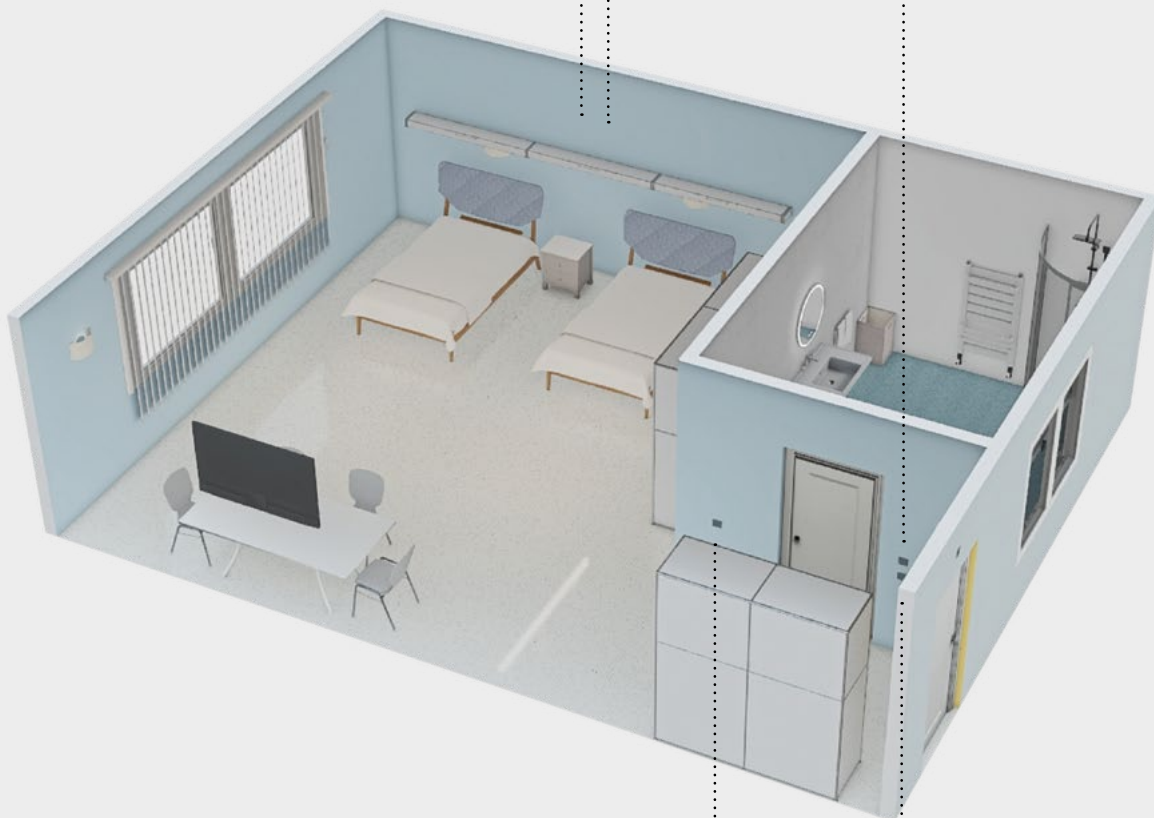
DCP2017/H



PTR



PTF



STI



PRL





System structure and main functions

SYSTEM COMPONENTS

- One dedicated computer (not supplied by I.T.C.) with Windows 7 professional or Windows 10 Pro operating system.
- USB/RS485 signal converter,
- Signal splitters,
- One UGC-H control unit for each room (or one control unit every 2 rooms),
- Call buttons and pull cords (not supplied by I.T.C.),
- Sockets and coded jacks for local reset,
- One high-sensitivity microphone for each room (3-4 m range) for 3-module flush mounting box,
- One recessed speaker in each room,
- One temperature sensor in each room,
- One thermostat panel in each room,
- One desktop microphone unit and one speaker for control station,
- Power supply units for microphones and speakers,
- One UGT control unit for every 8 common bathrooms, with possibility of alarm luminous repetition on door and reset from PC only. Optional terminal for connection of 16 bathroom cords for every control unit, with alarm identification from PC only.
- One UGT control unit every 8 luminous guides,
- Lamps, gems, transformers, etc. to complete the installation (not supplied by I.T.C.).
- PBX telephone system (not supplied by I.T.C.),
- Fixed telephones (not supplied by I.T.C.),
- Cordless telephones (not supplied by I.T.C.).

FUNCTIONS

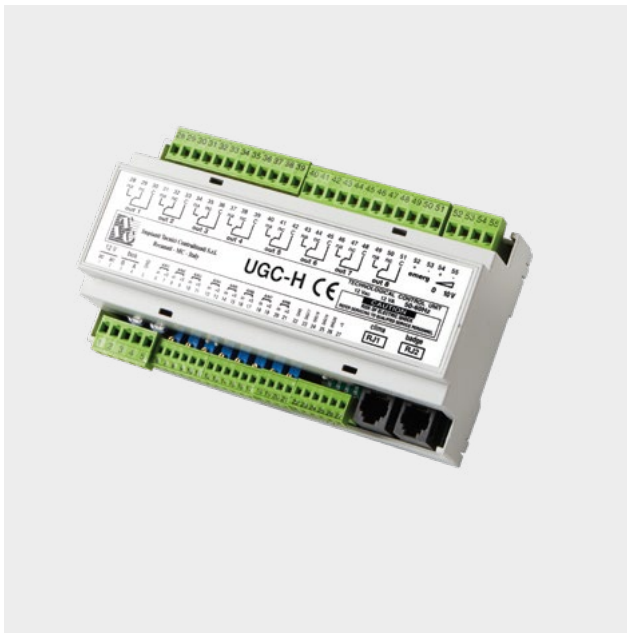
- Bathroom and bed headboard alarm detection, with switch on of door light and reassuring light,
- Local reset (with coded jack) or from operator station.
- Full-duplex handsfree communication with patient, with activation from operator station,
- Detection of alarms from common bathrooms,
- Recording and printing of alarm and reset events,
- Constant control of system anomalies, with anomaly recording and printing,
- Luminous guides in corridors,
- Possibility to connect a unit for alarm/call message repetition.

In case of installations in nursing homes, in addition to the PC, the control station is also equipped with a station for bidirectional communication with patient. This station includes one microphone, one speaker and one amplified power supply. In case of bed headboard call, the door light signal switches on and the visual/sound signal is activated on the PC, with identification of calling room. The nurse can activate the bidirectional communication with the patient and then reset the alarm directly from the PC. If direct intervention is necessary in the room, the alarm can be reset by inserting a coded jack in the socket. In case of call from other rooms (bathrooms, changing rooms, etc.) the operation is the same, except for handsfree communication. The system can also manage the switch-on of luminous arrows installed along the corridors that guide the staff to the room where the call is originated.

ROOM CONTROL UNIT

UGC-H

cod. 6300-101010



The UGC-H control unit is housed in 9-module box for DIN rail. It is provided with 8 analog and 4 digital inputs for connection of following devices:

- "ST1" temperature sensors,
- NO or NC type alarm/anomaly contacts,
- -buttons,
- bathroom pull cords for help call.

It is also provided with socket for PTF/PTR panel (max. 1) and 8 relay outputs with voltage free contacts for loads at 230Vac - 4(2)A.

Data transmission over 2-wire UTP CAT.5 bus cable in half-duplex RS 485 standard.

Reprogrammable microcontroller of flash type.

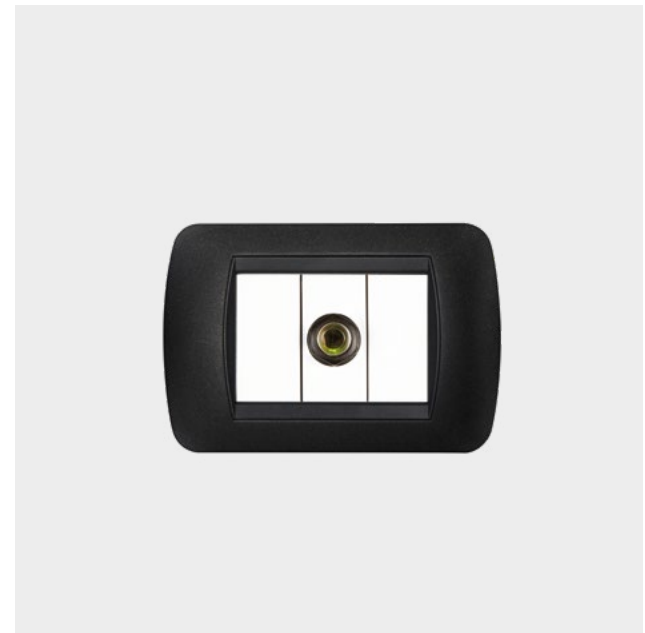
12Vac, 15VA power supply.

Dimensions: 160x100x60 mm. Weight: 0.50 kg.

SOCKET FOR LOCAL RESET

PRL

cod. 6300-141000



* Civil series > p. 97

Socket for local alarm reset by means of coded jack for identification of operator with display, recording, storing and printing of events.

Weight: 0.03 kg. Depth 46mm.

TEMPERATURE SENSOR

STI

cod. 6100-131000



* Civil series › p. 97



It measures the temperature of the room where it is installed. It is composed of an NTC sensor and is installed in a standard blank insert.

It must be installed at 150/170 cm from the ground, in specific box away from heat sources or air draughts. Weight: 0.03 kg. Depth: 35mm.

FANCOIL THERMOSTAT PANEL

PTF

cod. 6100-133000



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It allows the guest to change temperature, speed, automatic or manual operation and switch off air conditioning. The display shows time, set and measured temperature and speed. The light sensor optimises contrast and luminous symbols give information on operation status. It is housed in 3-module box and connected to the control unit by means of 6-wire cable terminated with RJ12 PLUG. Weight: 0.10 kg. Depth 45mm.

RADIATOR THERMOSTAT PANEL

PTR

cod. 6100-135000



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It allows the guest to change temperature, switch on and off the heating.

The display shows time and set and measured temperature. The light sensor optimises contrast and luminous symbols give information on operation status. It is housed in 3-module box and connected to the control unit by means of 6-wire cable terminated with RJ12 PLUG.

Weight: 0.10 kg. Depth 45mm.

AMPLIFIED POWER SUPPLY

A20 / 5

cod. 3200-211010



The preamplification circuit is provided with one Aux input for connection of an external sound source (CD player, etc.), and one input to process the signal from max. 3 desktop microphone units BMCP/A for priority call on sound source. It is also provided with adjustment of input level of the Aux and Mic signals and with adjustment of output signal level, suitable for connection with lines of "SM" series amplified speakers. It can power max. n. 20x10W or n. 5x20W powered speakers. For installations with a higher number of speakers additional A20/5 power supplies must be used. Made of painted metal, for wall-mounted or desktop installation.

TECHNICAL SPECIFICATIONS

Input impedance Aux	100K Ω
Input sensitivity Aux	-12dB
Input impedance Mic.	15 K Ω
Output sensitivity	10 Ω
Max output level	+8dB -4Vpp
Power supply	220Vac
Power absorption	120VA
Distributed voltages	18Vdc/4A - 12Vdc/1A - 9Vdc/0,5A
Dimensions	230x60x210mm
Material	metal
Colour	black
Weight	3,6kg

ADDITIONAL POWER SUPPLY

AS20 / 5

cod. 3100-131010



In amplified systems it enables power supply for n. 20x10W or n. 5x20W powered speakers of the 'AUDIO RSA' series. Produced in painted metal, it can be wall mounted or supported on a surface.

TECHNICAL SPECIFICATIONS

Power supply	220Vac
Power absorption	120VA
Distributed voltage	18Vdc/4A
Dimensions	230x60x210mm
Material	metal
Colour	black
Weight	3,4Kg

PREAMPLIFIED DESKTOP MICROPHONE UNIT

BMCP / A

cod. 3200-221010



Unit with gooseneck microphone, cardioid electret with luminous ring, suitable for voice announcements in combination with A20/5 or AD20/5 power supply.

It can be also connected to announcement generator GSV. Provided with one stable and one unstable button to activate microphone and priority contact for attenuation of sound source connected to the same power supply, and activate the circuit to generate the dual-tone signal. Two leds indicate button activation.

It is powered directly from the power supply to which it is connected. Aluminium extruded body, ABS sides with feet. Complete with 5m connection cable. Grey/ black colour.

TECHNICAL SPECIFICATIONS

Output impedance	10KΩ
Output level	3Vpp
Frequency response	100-15000Hz
Power supply	12Vdc
Absorption	50mA
Microphone type	electret - 500mm rod
Dimensions	206x550x130mm
Material	plastic/metal
Colour	black/grey
Weight	1,4Kg

BOX 503 RECESSED MICROPHONE

MI503

cod. 3200-231000



* Civil series › p. 97



High-sensitivity electret cardioid microphone that guarantees excellent voice quality in situations where the speaker is distant from the microphone.

To combine with A20/5 amplified power supply.

Microphone capsule and preamplifier circuit mounted on vetronite support with adhesive lexan, suitable for installation in 3-module box that is taken completely.

Available in multiple civil series. Weight: 0.09 Kg.

TECHNICAL SPECIFICATIONS

Input impedance	10K Ω
Output level	3Vpp
Frequency response	100-15000Hz
Power supply	12Vdc
Absorption	50mA
Microphone type	electrete
Material	metal

BOX 503 RECESSED SPEAKER

DI503 / H

cod. 6400-103000



* Civil series › p. 97



Small-size speaker for installation in box 503 that is taken completely. The size of the loudspeaker permits a power of 3 W. Indicated for those rooms where there are space problems.

Equipped with CA10MP amplifier module to be housed separately. Available in multiple civil series.

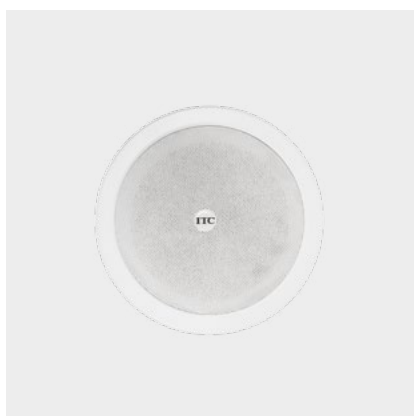
TECHNICAL SPECIFICATIONS

RMS power	3W
Frequency response	220-20000Hz
Impedance	8 Ω
Loudspeaker type	fullrange
Material	metal

10W AMPLIFIED CEILING-MOUNT SPEAKER

DC20 / H

cod. 6400-120101



Ceiling-mount speaker for excellent playback quality of voice announcements and background music. Body and grille made of painted metal, provided with spring clips for easy installation in false ceiling. Complete with amplifier module with trimmer for better adjustment of sound level.

TECHNICAL SPECIFICATIONS

Type	ceiling mount
Input impedance	10K Ω
Input sensitivity	400mV
RMS power	10W
Power supply	18Vdc
Absorption	200mA
Frequency response	110 ÷ 15000Hz
S.P.L. 1W@1m	90 ±3dB
Speaker type	5" full range
Speaker impedance	8 Ω
Dimensions	ø200mm x 50mm
Recessed hole dimensions	ø170mm
Material	metal
Colour	white
Weight	0,7Kg

10W AMPLIFIED WALL-MOUNT SPEAKER

DCP2017 / H

cod. 6400-241101



Elegant speaker characterised by excellent quality of voice announcements and background music. ABS self-extinguishing body with painted metal grille, provided with rotary hooks for easy and quick installation in false ceilings. Alternatively, it can be installed on the wall with GEWISS PT5 recessed box (not supplied). Complete with amplifier module with trimmer for better adjustment of sound level.

TECHNICAL SPECIFICATIONS

Type	da incasso in controsoffitto
Input impedance	10K Ω
Input sensitivity	400mV
RMS power	10W
Power supply	18Vdc
Absorption	200mA
Frequency response	120 ÷ 18000Hz
S.P.L. 1W@1m	93dB
Speaker type	4" bicono
Speaker impedance	4 Ω
Dimensions	195x166x55mm
Recessed hole dimensions	155x125mm
Material	ABS/metal
Colour	white, black, grey
Weight	1Kg

10W AMPLIFIED WALL-MOUNT SPEAKER

DP2512 / H

cod. 6400-251101



Wall-fitted speaker for excellent playback quality of voice announcements and background music. Polycarbonate self-extinguishing body in class V2. Complete with amplifier module with trimmer for better adjustment of sound level.

TECHNICAL SPECIFICATIONS

Type	Sporgente da parete
Input impedance	10K Ω
Input sensitivity	400mV
RMS power	10W
Power supply	18Vdc
Absorption	200mA
Frequency response	120 ÷ 18000Hz
S.P.L. 1W@1m	93dB
Speaker type	4" bicono
Speaker impedance	4 Ω
Dimensions	250x120x73mm
Max. protrusion	73mm
Material	ABS
Colour	white, black, grey
Weight	1Kg

SUPERVISION AND CONTROL SOFTWARE

SWB

cod. 6600-300010

Extremely easy to use, with modern user-friendly graphics, it allows for complete management of rooms and common areas in terms of alarms, signalling messages, reset, temperature, full-duplex handsfree conversation and technological controls. It is provided with historical database to record and print all events (alarms, signalling messages, anomalies, accesses, etc.). It is prearranged for management of additional workstations and can be interfaced with PBX telephone system to send alarm signals to cordless telephone and page staff.

MEGA-RSA ROOM MANAGEMENT SOFTWARE

SWG-H

SWG-H25 cod. 6300-181025
Room management software from 1 to 25 rooms

SWG-H50 cod. 6300-181050
Room management software from 26 to 50 rooms

SWG-H75 cod. 6300-181075
Room management software from 51 to 75 rooms

SWG-H100 cod. 6300-181100
Room management software from 76 to 100 rooms

SWG-H150 cod. 6300-181150
Room management software from 101 to 150 rooms

SWG-H200 cod. 6300-181200
Room management software from 151 to 200 rooms

SWG-H250 cod. 6300-181250
Room management software from 201 to 250 rooms

SWG-H500 cod. 6300-181500
Room management software from 251 to 500 rooms

SWG-H1000 cod. 6300-181999
Room management software from 501 to 1000 rooms

SOFTWARE INTERFACE FOR CORDLESS TELEPHONES

SW / C

cod. 6300-182000

It allows to send calls and warnings from MEGA-RSA system to staff cordless telephones; this way, they can be promptly informed also when they are far from the control station.

IMPORTANT NOTICE

The UGC-H control unit is mounted in DIN rail and takes 9 modules. It must be powered at 12Vac with 15VA transformer. An independent transformer must be used for each control unit, connected to dedicated electrical line with on-line UPS.

Always disconnect power supply before making electrical connections.

Temperature sensors must be installed in dedicated boxes at approx. 1.5 m from the floor, in a place protected from sunlight and away from air draughts or heat sources (i.e. doors, windows, perimeter walls, etc.). Do not install it above the thermostat panel because it generates heat.

Connection cables of the input devices (such as temperature sensors, magnetic contacts, buttons, jack sockets, etc.) must not exceed 20 m in length.

Radiator or fan-coil valves must be of ON/OFF type. Valve controls must be provided with 220Vac voltage. The electrothermal model must be of NC type, i.e. with control mounted on the valve and not powered, the water flow must be blocked.

Use a good-quality crimping tool to crimp PLUG connectors and check them with suitable cable tester. The cable length must not exceed 15 metres.

It is recommended to install a 1.6A delayed fuse between the relay output contact and the load to protect the control unit.

We recommend keeping signal lines (data BUS, inputs, etc.) separate from power lines.(BUS dati, ingressi, ecc.)

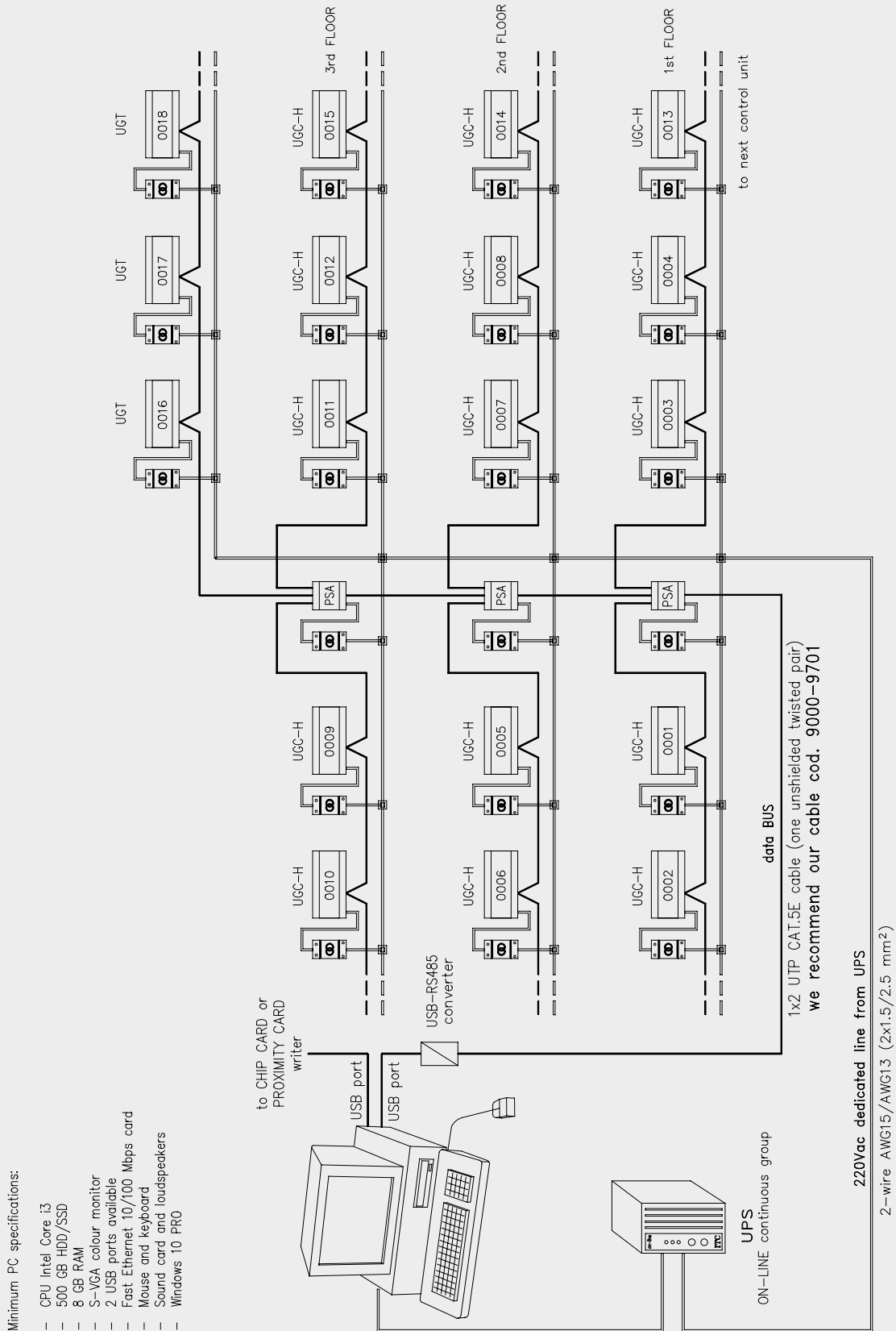
The minimum requirements of the PC used to control the installation are as follows:

- Operating system: Windows 7 professional or Windows 10 Pro.
- Intel i3 CPU
- 2500 GB hard disk
- 4 GB Ram
- S-VGA colour monitor
- 2 USB ports dedicated to MEGA system + 2 additional USB ports available
- Fast Ethernet 10/100 Mbps network board with Internet access, for potential remote assistance
- If you implement an interface with an air-conditioning system, we recommend a second dedicated Ethernet network board
- Mouse and keyboard
- Audio board and speakers

For correct operation the PC must be always on and must be dedicated to MEGA-RSA system.

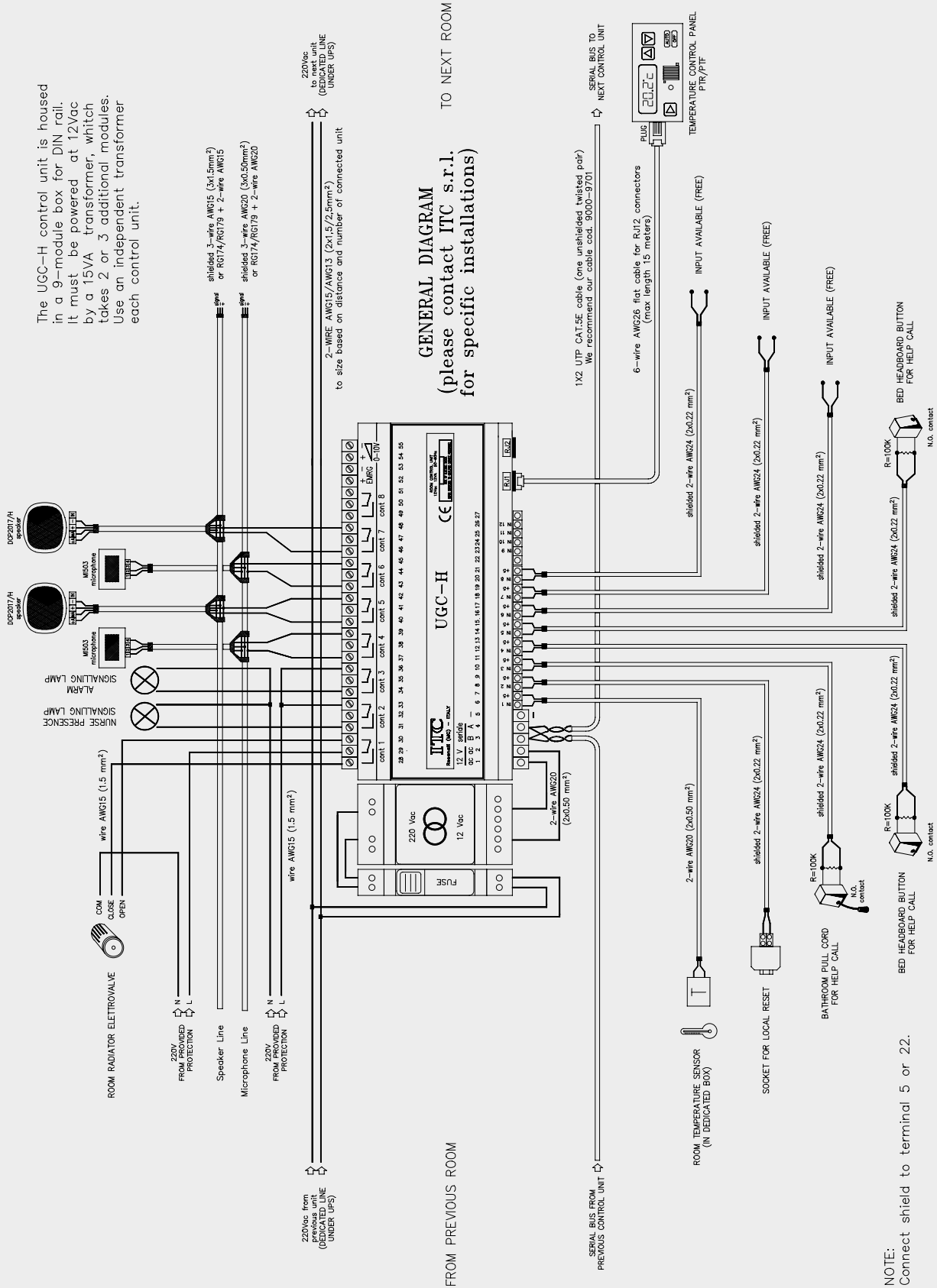
The control software works at 800x600 pixel resolution.

BUS AND POWER SUPPLY CONNECTION DIAGRAM



MULTI-WIRE ROOM DIAGRAM

The UGC-H control unit is housed in a 9-module box for DIN rail. It must be powered at 12Vac by a 15VA transformer, which takes 2 or 3 additional modules. Use an independent transformer each control unit.



NOTE:
Connect shield to terminal 5 or 22.