

R001

TG650

Room Control Unit



Summary

TG650 Microprocessor Room Control Unit is designed to manage and control hotel room services.

The Room Unit automatically manages the electric system validation on customer or staff presence inside the room.

By the function of Temperature setting it's possible to manage various temperature levels depending on the room occupation, with the possibility of local parameters adjustments or from the main PC unit. Moreover it is possible to manage fan-coil systems with 2 or 4 pipes, with or without regulation valves and split.

The access to the room is managed by a reader that provides the door open validation through an electric door-lock. Each access to the room and each alarm advice is recorded in the main PC unit.

Control functions

- Room temperature management with set-point variation
- Regulation valve/s and fan-coil speed control
- Electric loads control
- Courtesy light control
- Access control
- Buzzer/door-bell control
- Anti-intrusion (window/door) and bathroom Alarms
- "Do not disturb" message
- Two available and settable alarms (i.e.: flooding)

Orders

To order the Control Unit simply specify:

Control Unit model:

- TG650 for each room
- TG650A for each common area (Restaurants, swimming-pools etc...)
- TG650T for Technologic Areas (pumps, levels etc... status control)

Planning

Room Control Unit is placed inside an embedding panel with protections and TG001 transformer.

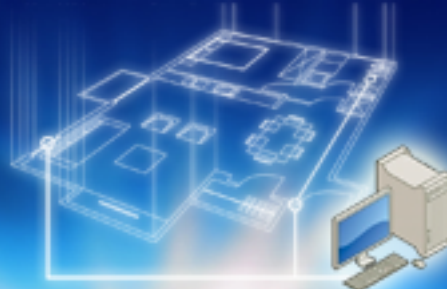
When planning the system installation adhere to all the norms (CEI) related to electric device installation.

Installation

The module, usually replacing the room control unit placed inside the electric panel provided with a DIN guide, must be accessible. The transformer can be placed in the same container.

Linked units must be placed as follows:

- Access reader, beside of the entrance door at the door-lock height
- Validator Pocket, inside of the room, close to the entrance door
- Environmental thermostat, in the middle of the room



Other system components

Transponder reader TG 348
 Chip card reader TG 325
 Room Services Validator TG 666
 Environmental Thermostat TG 503
 Serial converter PC/Bus TG 004/5
 Repeater Bus floor (optional) TG 606

Tecnical Features

Feeding 11 V AC TG001 Output command 220 V AC (8 A max) FanCoil Speed 1,2,3
 Corruent 300 mA (2 A max) Valve Auxiliary Lock
 Digital input for Bathroom Allarm Button (Do not distur.) Command output 220 V AC (8 A max) Light and courtesy light
 Window contact
 Door contact
 Pocket contact
 Auxiliary 1,2,3
 Feeding 10 – 16 V DC (600mA Max) Room bus RS485 (4800 baud)
 Building bus RS485 (38400 baud)
 Dimension (HxLxD) 90x160x65 mm
 Weight 0,300 Kg
 Working Temp. 0..+50°C
 Store Temp. -20..+ 50°C
 Relative humidity 80 % annual average
 Protection grade IP 44

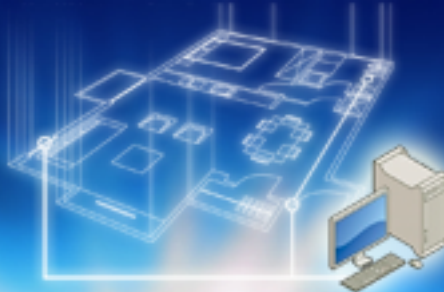
Unity addressing

The room unit must be addressed using the special dip-switches.

Number of the DIP Switches	Value binary for DIP Switch	Room address wanted (examples)	DIP Switches ON positioned (examples)
1	1	1	1
2	2	2	2
3	4	3	1,2
4	8	4	3
5	16	10	2,4
6	32	25	1,4,5
7	64	125	1,3,4,5,6,7
8	128	250	2,4,5,6,7,8

Example address room 25:
 DIP Switches su ON 1,4,5





Room Unit Functions list

Electric:

- Shutdown electric devices during the customer's absence (adjustable)

Water:

- Shutdown toilet flow in an empty room, if provided of a solenoid valve or on flooding sensor advice

Air Conditioning:

- Energy saving temperature setting in an empty room (adjustable)
- Artificial ventilation shutdown at window opening (adjustable)

Security:

- Room access with Transponder/CHIP card only
- Bathroom alarm management (adjustable)
- Door and windows intrusion signaling
- Flooding alarm signaling (adjustable)

In-room settables:

- Set Point Value adjustments
- Artificial ventilation speed adjustments
- Do not disturb

From the main Pc unit:

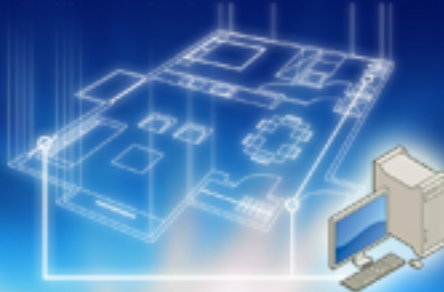
- Rooms and common areas access codes programming
- Operation parameters adjustment
- Set Point Value adjustments
- Room status queries
- Alarms signaling
- Thermo-regulation data acquirement (temperature, valve position etc...)

Outputs:

- Air conditioning control
- Hot/cold valve control
- Fan speed 0-1-2-3 control
- Electric loads control, electric door-lock and door-bell

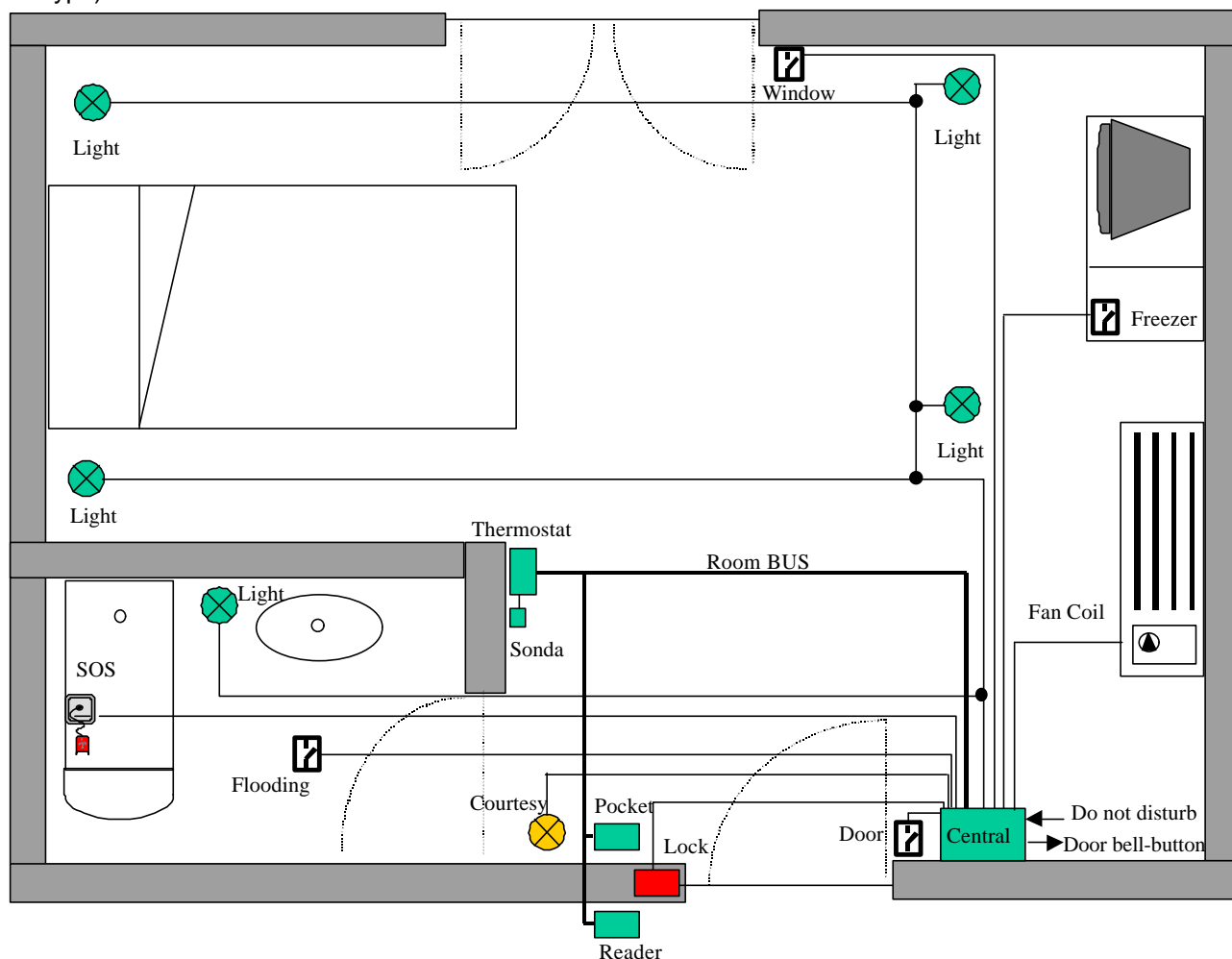
Communication:

- The unit communicates with an RS-485 Bus Dual through the main PC unit, that manages and acquires all meaningful information
- The unit communicates through an RS-485 Bus Dual with room units like card/transponder readers, temperature control unit and entrance/exit unit.

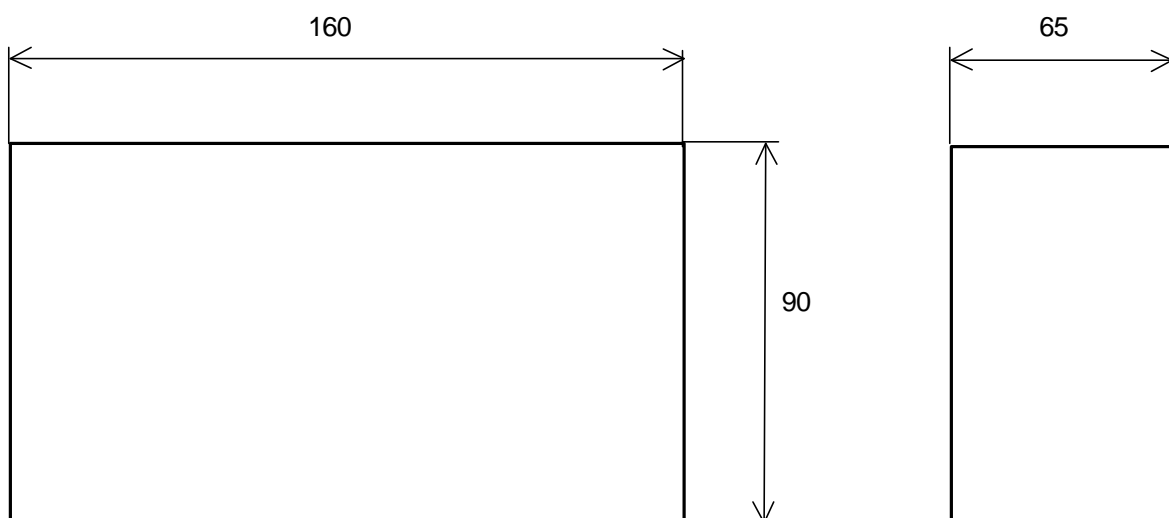


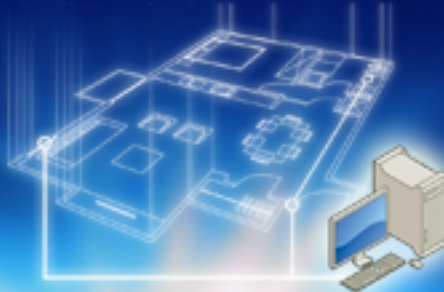
Connection schemes

(Room type)



Dimensions (mm)





Room connections unit

