



HOTEL SOLUTION™

Transponder card holder

HTH3.1/B

Transponder card holder for identification of room occupancy status

- Touch-free recognition of access code on transponder card
- Transfer of access code to HRC3.. room controller
- Built-in optical display for orientation upon entering hotel room
- Built-in speaker for three-tone chimes (doorbell feature)

Application

The HTH3.1/B transponder card holder is used in conjunction with the HRC3.. room controller. Guest and hotel-staff access codes are detected touch-free by the HTH3.1/B transponder card holder, and transmitted to the HRC3.. room controller for evaluation. The HRC3.. room controller activates the occupancy-dependent room functions in the hotel room in accordance with the room occupancy status (guest(s) in the room, hotel staff in the room, or room empty).

Functions

The HTH3.1/B transponder card holder communicates with the HRC3.. room controller via a serial port, and has the following functions:

- Indicates the location of the card holder with 4 built-in LED indicators, to assist those entering the room
- Reads the access code on the transponder card, which is inserted in the card slot on the front of the card holder
- After reading it, transfers the access code to HRC3.. room controller
- Enables the occupancy-dependent room functions based on the room occupancy status (guest(s) in the room, hotel staff in the room, room empty)
- Three-tone chime through built-in speaker for doorbell feature

Types

HTH3.1/B Transponder card holder

Ordering

When ordering, please specify the quantity, product name and type code:

Example **30 Transponder card holders HTH3.1/B**

30 Base frame for installation system AZ26.x (where X = 1 ...4)

Base frame The base frame must be ordered separately (as in the table below):

Base frame	Cover frame
AZ26.1	Bticino Living International
	Bticino Light
AZ26.2	Vimar Idea
	Siemens Delta Futura
AZ26.3	Ave Sistema 45
	Gewiss Playbus
AZ26.4	Legrand Ergo

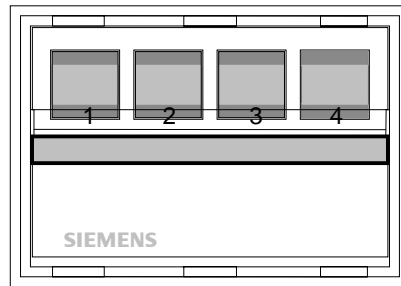
Compatibility

See assortment overview, N6301.

The HTH3.1/B transponder card holder consists of:

- Plastic housing
- Front with
 - 4 LED fields, red LEDs
- Rear, with
 - Screw-terminal connections
 - Pushbutton for bus address configuration
 - Plug-in connection (not used)
- The card holder accommodates a built-in speaker for three-tone chimes, which can be activated by the "doorbell" button built into the HTR3.1/B transponder card reader.

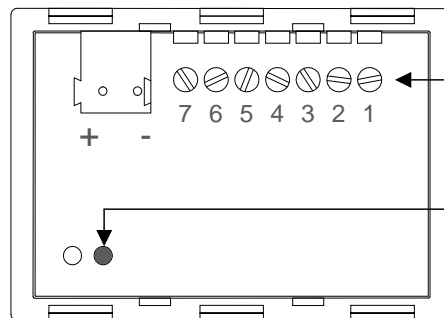
Front



- 1: LED field 1 (red or OFF)
- 2: LED field 2 (red or OFF)
- 3: LED field 3 (red or OFF)
- 4: LED field 4 (red or OFF)

Card slot

Rear



Screw terminal connections

Pushbutton for bus address configuration

LED display

- All four LED fields light up when someone enters the room and there is, as yet, no transponder card in the HTH3.1/B transponder card holder. This helps users to locate the card holder and card slot when entering the room.
- All four LED fields switch off when a guest access card is inserted (the guest code will already have been read as part of the access control procedure outside the door)
- LED field 1 lights up and LED fields 2 ...4 switch off when a hotel-staff access card is inserted (the hotel-staff code will already have been read as part of the access control procedure outside the door)

Engineering notes

The HTH3.1/B transponder card is designed for flush wall mounting, and for fixing purposes is installed in a type AZ26.x base frame (where x = 1...4). Cover frames for this base unit are available from the installation ranges of various manufacturers (see "Ordering").

Up to four card holders can be connected to the same room bus.

The address is set by means of pushbutton on the rear of the device (see below).

The maximum permitted current associated with the supply voltage from the HRC3.. room controller must not be exceeded.

Other information

Refer to data sheet CM2N6313.

Mounting

- The HTH3.1/B transponder card holder must be mounted in the entrance lobby of the hotel room at the same height as the light switch.
- Ensure that there is sufficient spare cable in the mounting box to allow access to the pushbutton on the back for the programming of addresses.
- The device is intended for fixed installation in a dry, enclosed space.
- For three modules, the mounting box must be installed at a depth of 47.5 mm
- Mount horizontally only, with the front plate vertical
- Do not install AC 230 V devices in the same mounting box
- Commissioning must be carried out by trained personnel only
- Do not open the card holder
- Local safety and installation regulations must be observed

Commissioning

The address can be set by means of pushbutton on the rear of the device:

1. Connect the device to the room controller
2. To activate programming mode, hold down the pushbutton for 3 seconds with a small screwdriver:
All the LEDs will then light up to indicate programming mode.
3. Pressing the button briefly changes the address one step at a time, allowing you to cycle through the addresses shown below.
4. Hold the pushbutton down for 3 seconds again to save the address.
The new address is saved in the non-volatile area of the memory.
All LEDs then switch off.

The addresses are indicated in code form by the following LED sequences:

Bus address	LED 1	LED 2	LED 3
Ready for programming	ON	ON	ON
0x3C	ON	OFF	OFF
0x3D	OFF	ON	OFF
0x3E	OFF	OFF	ON
0x3F	ON	ON	OFF

Note In the standard application with only one HTH3.1/B transponder card holder, the holder address is 0x3C.
This address is factory-set in the HTH3.1/B transponder card holder.

Three-tone chimes

The volume for the three-tone chimes can be adjusted only by opening the unit, and must be set by qualified personnel only. The chime sequence (melody) is determined by a parameter in the room controller.

Notes on operation (alarms)

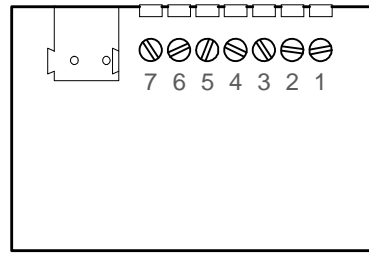
Light pattern	Description
Fast flashing of all symbols	No bus signal, for the following reasons: <ul style="list-style-type: none"> – Room controller switched off – Room controller faulty – Bus cable not connected or loose connection
Slow flashing of all symbols (2 Hz)	No bus signal for this device address Possible reasons: <ul style="list-style-type: none"> – Wrong address set in the device – Wrong address set in the room controller

Technical data

Power supply (from HRC3..)	Working voltage (SELV, PELV)	DC 12 V +/- 10%, 1.2 W in normal operation 3.5 W when chimes are operated	
Bus interface	Bus voltage	SELV DC 12 V	
	Type	RS485	
	Transmission speed	4800 baud	
Screw terminals	Max. conductor cross-section	1.5 mm ²	
Display	Luminous intensity of LEDs:	1.8 mcd	
Transponder card holder	Read/write chip	Atmel/Temic T5567 or T5557	
	Operating frequency	125 kHz	
Transponder cards	Aerial	Rectangular, T5567	
	Operating frequency	125 kHz	
3-tone chime	Power	Max. 600 mW	
	Tone 1:	660Hz	
	Tone 2:	550Hz	
	Tone 3:	440Hz	
Environmental conditions to EN 50090-2.2	Operating temperature:	0...50°C	
	Transport temperature:	-20...55°C	
	Humidity	Max. 90% non-condensing	
	Air pressure during operation:	Min. 700hPa (3000m above sea level)	
Standards	Air pressure during transportation:	Min. 700hPa (10, 000m above sea level)	
	Electromagnetic compatibility	Emitted interference in residential areas	EN 61 000-6-3
		Interference immunity in residential areas	EN 61 000-6-1 EN 50090-2.2
	Housing protection standard	To EN 60 529	IP 20
Protection class	To EN 61 140	III	
CE conformity	Meets the requirements of: EMC Directive	89/336/EEC	
UL/CUL approval		UL/CUL 916	
Dimensions	Suitable for flush mounting in rectangular flush-mounting box or cavity wall box	3 modules	
	Orientation	Horizontal only	
	See also dimension diagrams	51 x 73.5 x 62 mm (H x W x D)	
Color	Plastic components	Gray	
	Front	Gray	
Weight	Without packaging	84 g	
	With packaging	146 g	

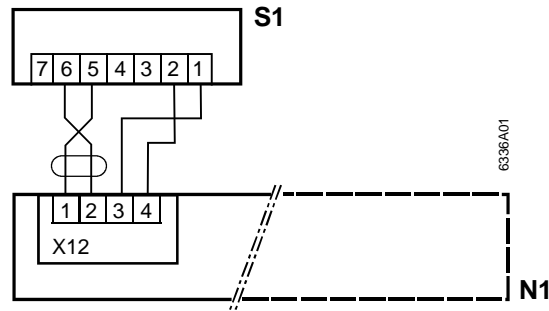
Connection diagrams

Connection terminals



- 1 DC +12V
- 2 DC -12V (GND)
- 3 Not used
- 4 Not used
- 5 BUS RS 485 TX
- 6 BUS RS 485 RX
- 7 GND

Circuit diagram

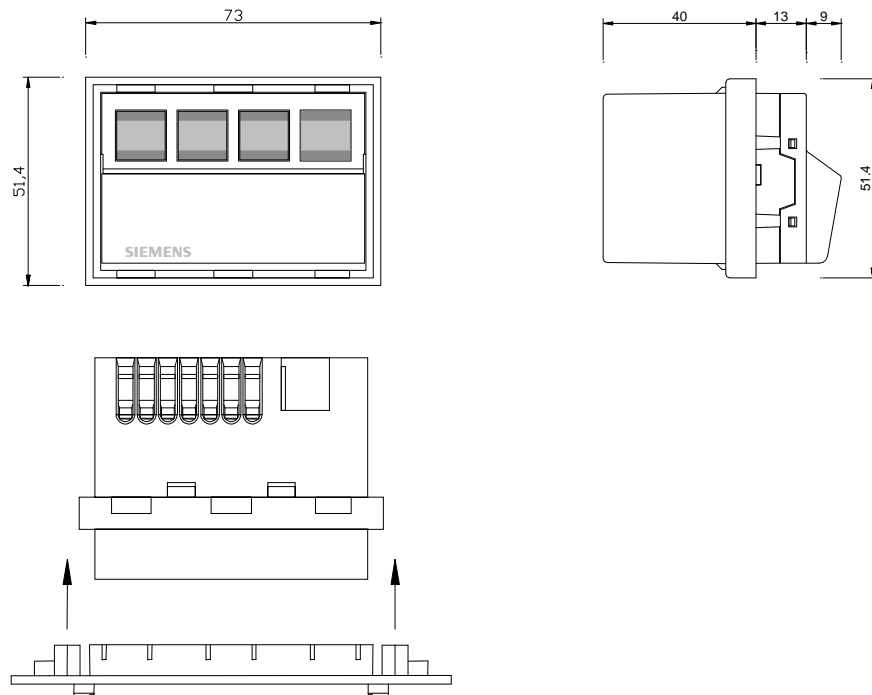


S1 Transponder card holder
HTH3.1/B

N1 HRC3.. room controller

Dimensions

Dimensions in mm



Transponder card holder with base frame AZ26.1; AZ26.2; AZ26.3; AZ26.