



HOTEL SOLUTION™

## Magnetic card encoder

## HBC1.M

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### Magnetic card encoder/reader with 2-line display

- Writes access code on Track 2 of the magnetic card (to ISO 7810)
- Reads access code from Track 2 of the magnetic card (to ISO 7810)
- Linked to HOTEL SOLUTION database
- Guides user with text instructions on 2-line display
- LEDs to indicate device status (mains voltage / read status / write status)

### Application

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The HBC1.M magnetic card encoder is used in conjunction with the HOTEL SOLUTION software and HOTEL SOLUTION database to program the magnetic (room key) cards at Reception. The HBC1.M magnetic card encoder is a desktop unit, operated with the HOTEL SOLUTION software via a serial port. Encoded magnetic cards can also be read and assigned to rooms or guests.

## Functions

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The HBC1.M magnetic card reader reads and encodes Track 2 of a magnetic card. For this purpose, the magnetic card must be inserted with the magnetic strip facing downwards and to the right, as illustrated on the front of the unit. Magnetic cards can be created for a specific room for a guest, or for a group of rooms for the hotel staff. Information and instructions on the LCD panel guide the user through the encoding procedure.

## Types

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**HBC1.M**      **Magnetic card encoder**

## Ordering

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

Example      **4**      **Magnetic card encoders**      **HBC1.M**

## Compatibility

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The card encoder must be connected to a serial port of a PC running the HOTEL SOLUTION database software.

## Mechanical design

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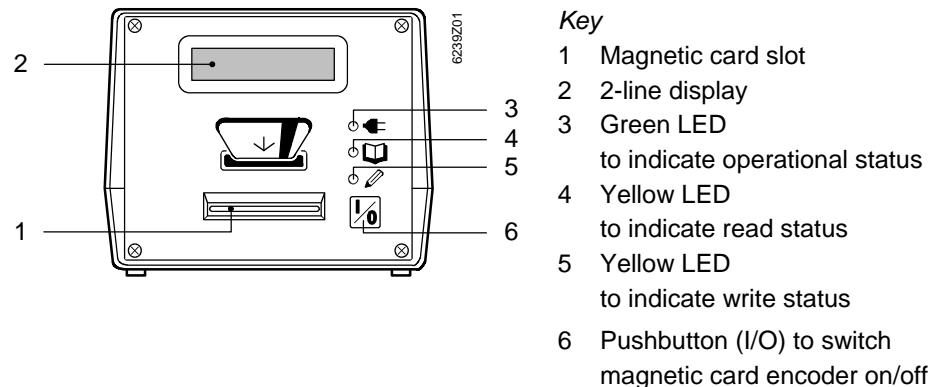
The magnetic card encoder is in a multi-part plastic housing.

The housing accommodates the automatic card-feeder unit to accept and return the card, and the electronic circuitry for reading and writing magnetic cards in compliance with ISO 7810.

A connector for the supply voltage is located on the right side of the card encoder. A power supply unit is supplied with the card encoder. The device can be switched on and off with a pushbutton on the front panel.

There is also a 9-pin female connector on the right side of the magnetic card encoder for the connection to the HOTEL SOLUTION software.

A serial RS232C bus cable is supplied for this purpose. The magnetic card encoder is a desktop unit with two folding base supports (to improve the user viewing angle).



The HBC1.M magnetic card encoder is a very important element of the HOTEL SOLUTION system. The number of HBC1.M magnetic card encoders must be in proportion to the size of the hotel, and an adequate number must be included when planning the system. As an absolute minimum, two HBC1.M magnetic card encoders are required, so that if one fails, card keys can still be encoded with the second card encoder.

The card encoder should be located close to the front-office system (FOS) or the HOTEL SOLUTION operator station.

If a long distance between the HBC1.M magnetic card encoder and the PC with the HOTEL SOLUTION database is unavoidable, a null modem is required.

## Mounting

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- The card encoder must be used only in dry, enclosed spaces
- Keep horizontal and on a firm base
- Commissioning must be carried out by trained personnel only
- Do not open the unit
- **Local safety and installation regulations must be observed**

## Accessories

(enclosed with the device)

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- AC 230 V/DC 24 V power supply unit with two-wire cable (approx. 1.5 m) and mains connector and one two-wire cable (approx. 1.5 m) to the card encoder. Both cables are fixed at one end to the power supply unit.
- Serial RS232 bus cable (approx. 2 m) with 25-pin connector and 9-pin connector

## Technical data

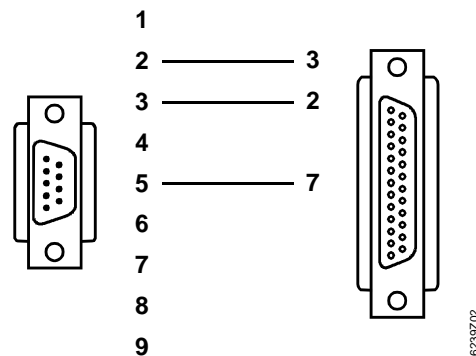
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Power supply	Power supply unit for AC 100... 240 V/	DC 24 V, max. 45 W 50-60Hz / max. 1.5 A	
	Socket on rear of unit	External diameter 5.5 mm, pin diameter 2 mm	
Bus interface	Bus voltage	SELV DC 12 V	
	Socket on rear of unit	RS232C D-Sub 9	
	Baud rate	4800 baud	
	Cable supplied	Length 2 m	
Display	Illuminated display	2 lines of 20 characters each	
Magnetic card encoders	Read/write track	Track 2, ISO 7810	
Magnetic cards	Format	86 x 54 x 0.76 mm	
		LoCo magnetic strip	
Environmental conditions to EN 50090-2.2	Operating temperature:	-5...50°C	
	Transport temperature:	-25...65°C	
	Humidity	Max. 95%, non-condensing	
	Air pressure during operation:	Min. 700hPa (3000m above sea level)	
	Air pressure during transportation:	Min. 700hPa (10, 000m above sea level)	
Standards			
	Electromagnetic compatibility	Emitted interference in residential areas Interference immunity in industrial areas	EN 50081-1 EN 50082-2 EN 50090-2.2

Housing protection	Protection standard	IP 30 to EN 60529
CE conformity UL/CUL approval	Protection class	III to IEC1140
	Meets the requirements of EMC Directive	89/336/EEC
Dimensions	Orientation during operation	Horizontal only
	See also dimension diagrams	137 x 172 x 245 mm (H x W x D)
Color	Plastic components	Gray
Weight excluding packaging	Magnetic card encoders	2 230 g
	Power supply unit	415 g
	Serial interface cable	140 g
Weight including packaging		3 325 g

## Connection diagrams

### Pin layout for connecting cable

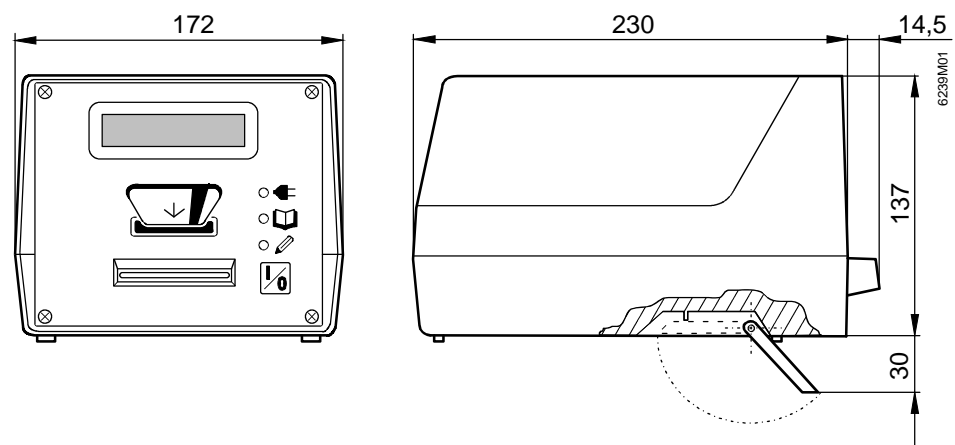


9-pin male connector to  
25-pin female connector

- 2 BUS RS 232 RXD
- 3 BUS RS 232 TXD
- 5 GND

## Dimensions

Dimensions in mm



Power supply unit