

# Mullion reader MIFARE®

## Applications

- Access control
- Time recording
- Time and attendance
- Door management
- Parking systems
- Elevator control

## Functions

- Proximity reader (MIFARE® )
- Reading distance: from 50 to 80 mm
- Encrypted data transmission adjustable
- Connection of 8 cardreaders to the access controller **XMP-K24<sup>plus</sup>** or **XMP-K32**
- Firmware update über SecuCrypt® protocol possible
- Power supply 12-24 V DC over door controller
- Adjustable address via dip switch
- Sabotage tamper
- Optionally with PIN-CODE keyboard (XMP-TMC2260)
- Easy mounting
- Signalling: 3 x LED's, 1 x buzzer
- Impact proofed housing (ABS )
- Potted completely including 2m connecting cable

## Technical data

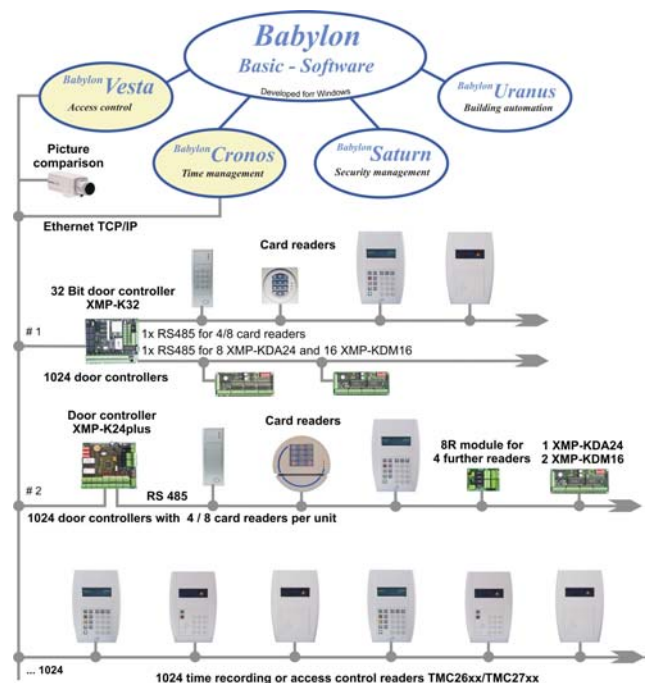
<b>Housing:</b>	ABS
<b>Color :</b>	Similar RAL9006/9007 silver
<b>Dimensions (HxLxW):</b>	50 x 136 x 25 mm
<b>Protection:</b>	IP 65
<b>Power supply:</b>	12-24 V (AC / DC)
<b>Current consumption:</b>	app.120mA at 12V DC
<b>Environmental conditons:</b>	-20°C to +70°C (operation and storage)
<b>Interface:</b>	RS 485 (2 wire)
<b>Processor:</b>	M16C 16 Bit; 16 MHz; CMOS-Design
<b>Memory:</b>	RAM 20kB Flash-Memory 256kB
<b>Accessories:</b>	Individual painting, High protection (IP65)

### Important customer information!

Defective circuit boards must be disposed in competent manner. Old batteries and accumulators are hazardous waste. The package can be used again or can be disposed. The green filling material can be disposed as bio waste.



**XMP-TMC2250-65      XMP-TMC2260-65**



**Scheme for the connection possibilities of cardreaders to BABYLON/NT**

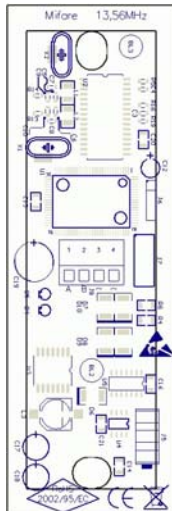
## Legend

**XMP-K24<sup>plus</sup>**: Intelligent door control unit with RS485 and 10Mbit LAN interface. Up to 8 access control terminals are connectable. The **XMP-K24<sup>plus</sup>** is equipped with 8 digital outputs and 16 digital inputs.

**XMP-K32**: Intelligent door control unit with RS485- and 10/100Mbit LAN interface. It is equipped with a 266MHz processor (embedded Linux operating system). **100.000** access profiles, **500.000** badges (extendable on **2.000.000**), **500.000** bookings.

## Order number:

- XMP-TMC2250-65 (silver)**
- XMP-TMC2250-S65 (black)**
- XMP-TMC2260-65 mit PIN-Code (silver)**
- XMP-TMC2260-S65 mit PIN-Code (black)**

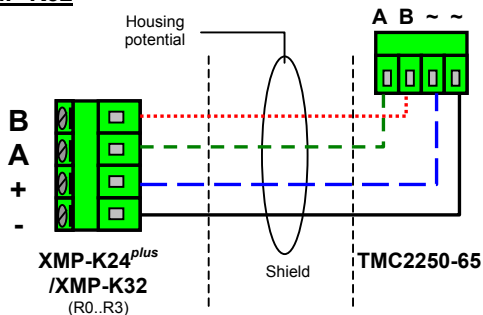


Backside of the cardreader

**Terminal assignment for the XMP-TMC2250/2260-65 with 2m long cable**

TMC2250 TMC2260 (J1)	XMP-K24/K32 (R1..R4)	Description
Brown	+ or -	Power supply
White	+ or -	Power supply
Green	B	RS485 Reader Interface
Yellow	A	RS485 Reader Interface

**Connection scheme for electrical wiring of this cardreaders and access controllers XMP-K24<sup>plus</sup> or XMP-K32**



**Hints on wiring:**

The card reader can be powered from access controllers internal power supply (12 VDC or 24VDC). The RS485 communication interface can be wired via bus or star structure.

**Card reader distances and cable types:**

Distance	Type of cable
Up to 200 m	2x2x0.8 (shielded)



Micro switches in the front area

**Meaning of the micro switches SW1**

Switch	Meaning
1-3	For binary setting of the reader addresses 0..7 (e.g. only switch 1 = ON → reader address 1, or only switch 3 = ON → reader address 4, or 1, 2 and 3 = ON → reader address 7)
4	Default OFF
5	Baudrate setting to K24/K32 OFF: 9600
6	ON = UCI-Protokoll
7	Reserved
8	ON = Bootloader activated

**Hints to the reading methods**

The TMC2250/2260-65 reads the **serial number or sector-block-information** from MIFARE® cards. In case of reading the serial number a maximum 14 digit decimal card number (UID) will be transmitted. The sector block information will be transmitted as 16 bytes (ASCII format) or in 32 digits representing the corresponding half-bytes of a 16 byte block.

**Hints for reading distance**

In dependence on the environment conditions and types of data carrier the reading distance is maximum 80 mm. Metal parts within the distance of 120 mm to the reader can reduce the reading distance. Recommended badge types: ISO standard

**Meaning of the LEDs**

- yellow: operation state
- red: not authorized
- green: authorized
- Backside D4: communication TXD
- Backside D5: communication RXD

**Reader protocol**

- UCI** - Omron 5 Bit (like magnetic stripe)  
(Hint: XMP-K24<sup>plus</sup> – firmware release 3.8 or higher needed)
- SecuCrypt®** - Blowfish encryption  
(Hint: only for XMP-K32/K32lite)

**Dimensions (mm)**

