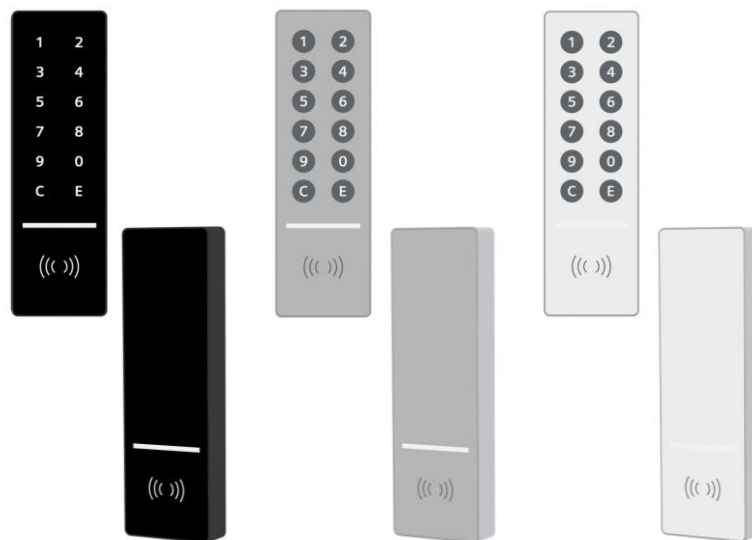


Technical data sheet



XMP-TMC2150 / XMP-TMC2160
XMP-TMC2170 / XMP-TMC2180

CARD READER

The reader generation XMP-TMC2100 is designed for access control applications and for integration into intrusion systems.

Each card reader has a SAM socket to fulfill the permanently growing security requirements of the market.

Via a serial interface (RS485) the card readers are connected to the door control units and communicating through an encrypted protocol called SecuCrypt® or OSDP™ V2.

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1 Technical data

Description	XMP-TMC2100
Processor	ARM 180 MHz
Program memory	1 MB Flash 136 KB RAM
Power supply	12 to 24 V DC $\pm 10\%$
Power consumption	35 to 95 mA with 12V DC 18 to 50 mA with 24V DC
Interface	RS485 (2 Wire)
Baud rate	9600 or 19200
Data communication	SecuCrypt® or OSDP™ V2
Tamper contact	Yes
Buzzer	Yes (configurable → melodies)
Status display	4x2 RGB LEDs (individually configurable)
SAM socket	Yes
DIP switch	Yes (not for IP65)
PIN-Code	Optional
PC housing (UL94 V0)	Yes
Protection class IP54	Yes
Protection class IP65	Yes
Environmental conditions	Housing temperature in operation IP54: -20 to 60°C (-4 to 140°F) Housing temperature in operation IP65: -20 to 70°C (-4 to 158°F) Storage: -20 to 75°C (-4 to 267°F) 5 to 90% relative humidity
Dimensions	See chapter „Order numbers“

1.1 Housing colors

Reader	Silver (similar to RAL 9006)	White (similar to RAL 9003)	Black (similar to RAL 9005)
XMP-TMC2150	x	x	x
XMP-TMC2160	x	x	x
XMP-TMC2170	x	x	x
XMP-TMC2180	x	x	x

1.2 Service – Cleaning – Disposal

Defective boards must be disposed properly. Batteries and accumulators belong to the hazardous waste. The packaging can be reused or disposed of.

Dispose of green filling material in biowaste.

The reader should only be cleaned with a duster, brush or vacuum cleaner.

If the housing is heavily soiled, a mild, non-aggressive detergent can be used.

1.3 Protection type






Protection type	IP54 or IP65
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- When installed IP54 / IP65
- The maximum protection class IP54 depends on the sealing against wall. (Not for IP65)
- Cable entries and mounting holes may need to be sealed with a sealant.
- Suitable sealants (such as silicone) should be selected according to the ambient conditions.

2 Order numbers







2.1 OEM card reader – XMP-TMC2150/60

Order number	Description	Dimension
 <p data-bbox="256 685 443 712">XMP-TMC2150</p>	<p data-bbox="523 510 1214 633"><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader for connection to door controller. (Color: black, Protection class: IP54).</i></p>	<p data-bbox="1262 535 1426 607">134 x 42 x 18 mm</p>
 <p data-bbox="240 1010 459 1037">XMP-TMC2150-W</p>	<p data-bbox="523 831 1214 954"><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader for connection to door controller. (Color: white, Protection class: IP54).</i></p>	<p data-bbox="1262 855 1426 927">134 x 42 x 18 mm</p>
 <p data-bbox="240 1330 459 1357">XMP-TMC2150-S</p>	<p data-bbox="523 1153 1214 1276"><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader for connection to door controller. (Color: silver, Protection class: IP54).</i></p>	<p data-bbox="1262 1178 1426 1249">134 x 42 x 18 mm</p>
 <p data-bbox="225 1653 475 1680">XMP-TMC2150-IP65</p>	<p data-bbox="523 1476 1214 1599"><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader for connection to door controller. (Color: black, Protection class: IP65).</i></p>	<p data-bbox="1262 1500 1426 1572">134 x 42 x 18 mm</p>
 <p data-bbox="209 1975 491 2002">XMP-TMC2150-W-IP65</p>	<p data-bbox="523 1798 1214 1921"><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader for connection to door controller. (Color: white, Protection class: IP65).</i></p>	<p data-bbox="1262 1823 1426 1895">134 x 42 x 18 mm</p>







Security System XMP-BABYLON

 <p>XMP-TMC2150-S-IP65</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader for connection to door controller. (Color: silver, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2150-BLE</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with integrated Bluetooth module for connection to door controller. (Color: black, Protection class: IP54).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2150-BLE-W</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with integrated Bluetooth module for connection to door controller. (Color: white, Protection class: IP54).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2150-BLE-S</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with integrated Bluetooth module for connection to door controller. (Color: silver, Protection class: IP54).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2150-BLE65</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with integrated Bluetooth module for connection to door controller. (Color: black, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2150-BLE65-W</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with integrated Bluetooth module for connection to door controller. (Color: white, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>


Security System XMP-BABYLON

 <p>XMP-TMC2150-BLE65-S</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with integrated Bluetooth module for connection to door controller. (Color: silver, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad for connection to door controller. (Color: black, Protection class: IP54).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160-W</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad for connection to door controller. (Color: white, Protection class: IP54).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160-S</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad for connection to door controller. (Color: silver, Protection class: IP54).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160-IP65</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad for connection to door controller. (Color: black, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160-IP65-W</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad for connection to door controller. (Color: white, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>

Security System XMP-BABYLON

 <p>XMP-TMC2160-IP65-S</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad for connection to door controller. (Color: silver, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160-BLE</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad with integrated Bluetooth module for connection to door controller. (Color: black, Protection class: IP54).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160-BLE-W</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad with integrated Bluetooth module for connection to door controller. (Color: white, Protection class: IP54).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160-BLE-S</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad with integrated Bluetooth module for connection to door controller. (Color: silver, Protection class: IP54).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160-BLE65</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad with integrated Bluetooth module for connection to door controller. (Color: black, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2160-BLE65-W</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad with integrated Bluetooth module for connection to door controller. (Color: white, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>






Security System XMP-BABYLON

 <p>XMP-TMC2160-BLE65-S</p>	<p><i>MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 card reader with PIN code keypad with integrated Bluetooth module for connection to door controller. (Color: silver, Protection class: IP65).</i></p>	<p>134 x 42 x 18 mm</p>
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2.2 Software licenses - XMP-TMC2150-F*

Description	Order number
CIPURSE™ (SAM) support	XMP-TMC2150-F1
Save MIFARE Classic®, MIFARE® DESFire® EV1/EV2/EV3 keys and SecuCrypt® custom key in SAM	XMP-TMC2150-F2
Support of Bluetooth/NFC XMP2GO®	XMP-TMC2150-F4-1



2.3 OEM card reader– XMP-TMC2170/80

Order number	Description	Dimension
 <p>XMP-TMC2170</p>	<p>Card reader without read and write function for connection to access controller (Color: black; Protection class IP54)</p> <p>Requires minimum one of the below licenses:</p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1 /EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2170-S</p>	<p>Card reader without read and write function for connection to access controller (Color: silver; Protection class IP54)</p> <p>Requires minimum one of the below licenses:</p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1 /EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2170-W</p>	<p>Card reader without read and write function for connection to access controller (Color: white; Protection class IP54)</p> <p>Requires minimum one of the below licenses:</p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2180</p>	<p>Card reader without read and write function with PIN code keyboard for connection to access controller (Color: black; Protection class IP54)</p> <p>Requires minimum one of the below licenses:</p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1 /EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>
 <p>XMP-TMC2180-S</p>	<p>Card reader without read and write function with PIN code keyboard for connection to access controller (Color: silver; Protection class IP54)</p> <p>Requires minimum one of the below licenses:</p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1 /EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>

Security System XMP-BABYLON

 <p style="text-align: center;">XMP-TMC2180-W</p>	<p><i>Card reader without read and write function with PIN code keyboard for connection to access controller (Color: white; Protection class IP54)</i></p> <p><i>Requires minimum one of the below licenses:</i></p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>
 <p style="text-align: center;">XMP-TMC2170-IP65-S</p>	<p><i>Card reader without read and write function for connection to access controller (Color: black; Protection class IP65)</i></p> <p><i>Requires minimum one of the below licenses:</i></p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1 /EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>
 <p style="text-align: center;">XMP-TMC2170-IP65-S</p>	<p><i>Card reader without read and write function for connection to access controller (Color: silver; Protection class IP65)</i></p> <p><i>Requires minimum one of the below licenses:</i></p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1 /EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>
 <p style="text-align: center;">XMP-TMC2170-IP65-W</p>	<p><i>Card reader without read and write function for connection to access controller (Color: white; Protection class IP65)</i></p> <p><i>Requires minimum one of the below licenses:</i></p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>
 <p style="text-align: center;">XMP-TMC2180-IP65</p>	<p><i>Card reader without read and write function with PIN code keyboard for connection to access controller (Color: black; Protection class IP65)</i></p> <p><i>Requires minimum one of the below licenses:</i></p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1 /EV2/EV3 XMP-TMC3070-F6 – Support of HID iCLASS® 	<p>134 x 42 x 18 mm</p>

Security System XMP-BABYLON

 <p>XMP-TMC2180-IP65-S</p>	<p><i>Card reader without read and write function with PIN code keyboard for connection to access controller (Color: silver; Protection class IP65)</i></p> <p><i>Requires minimum one of the below licenses:</i></p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1 /EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p style="text-align: center;">134 x 42 x 18 mm</p>
 <p>XMP-TMC2180-IP65-W</p>	<p><i>Card reader without read and write function with PIN code keyboard for connection to access controller (Color: white; Protection class IP65)</i></p> <p><i>Requires minimum one of the below licenses:</i></p> <ul style="list-style-type: none"> - XMP-TMC3070-F1 – Support of LEGIC® prime & advant - XMP-TMC3070-F5 – Support of MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3 - XMP-TMC3070-F6 – Support of HID iCLASS® 	<p style="text-align: center;">134 x 42 x 18 mm</p>

2.4 Software licenses - XMP-TMC2170-F*

Description	Order number
Support of LEGIC® prime & advant	XMP-TMC2170-F1
Save SecuCrypt® custom key in SAM	XMP-TMC2170-F2
Support of Bluetooth/NFC	XMP-TMC2170-F4
Support of MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3	XMP-TMC2170-F5
Support of HID iCLASS®	XMP-TMC2170-F6

2.5 Mounting frames

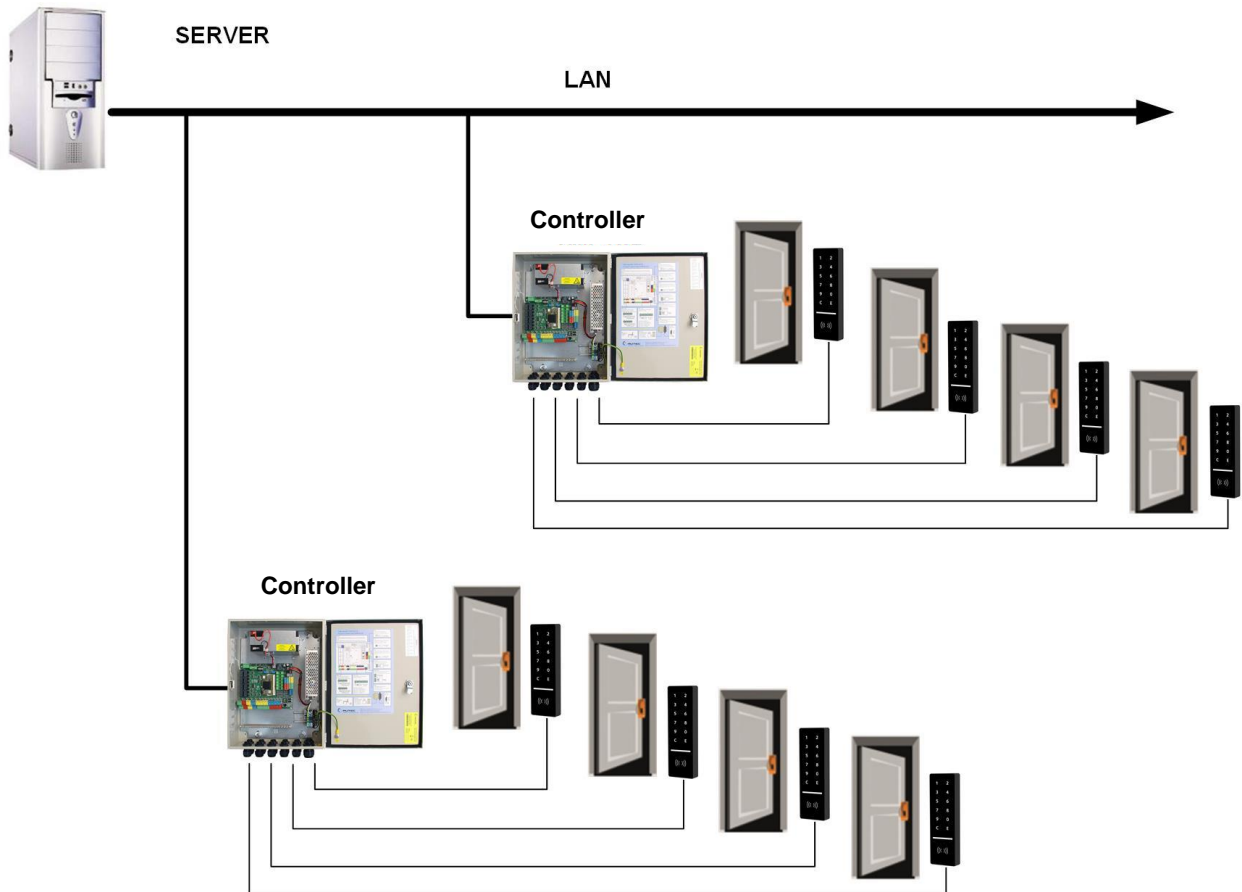
Order number	Description	Dimension
XMP-TMC21-RF1	<i>Mounting frame flat. (Color: black).</i>	132 x 40 x 15 mm
XMP-TMC21-RF2	<i>Mounting frame deep. (Color: black).</i>	132 x 40 x 26 mm
XMP-TMC21-RF1-W	<i>Mounting frame flat. (Color: white).</i>	132 x 40 x 15 mm
XMP-TMC21-RF2-W	<i>Mounting frame deep. (Color: white).</i>	132 x 40 x 26 mm
XMP-TMC21-RF1-S	<i>Mounting frame flat. (Color: silver).</i>	132 x 40 x 15 mm
XMP-TMC21-RF2-S	<i>Mounting frame deep. (Color: silver).</i>	132 x 40 x 26 mm



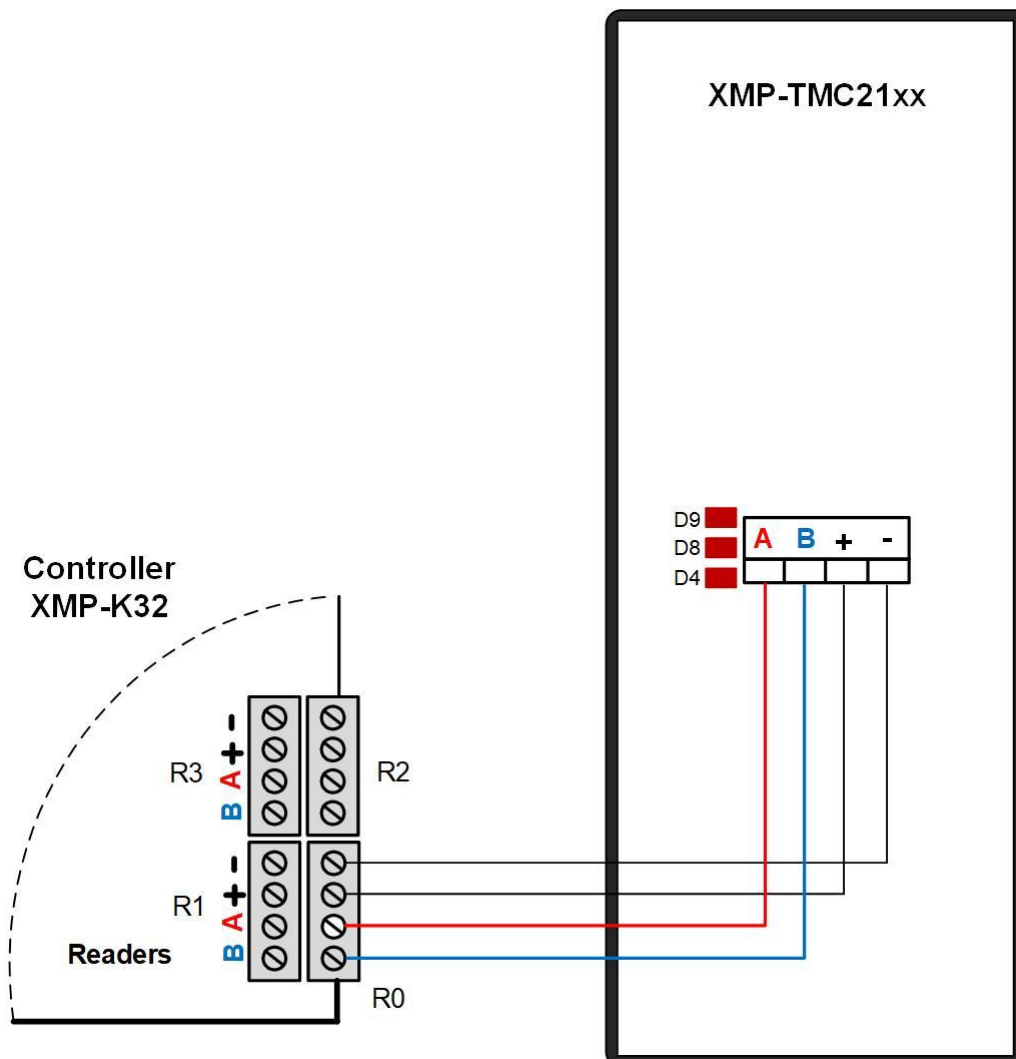
The connection socket/plug of the IP65 card reader is fully recessed in the deep mounting frame (RF2). When using the narrow mounting frame, a corresponding cavity must be provided for the IP65 connection plug.

3 System Overview

Up to 2048 controllers with 4 or 8 readers can be connected to one server.



3.1 Connection reader to controller



The power supply can be provided by the XMP-K12 / XMP-K32 (recommendation).

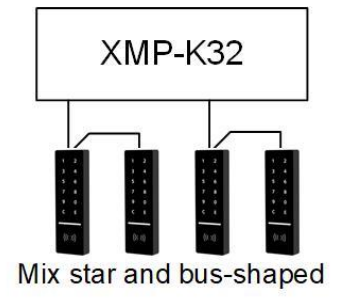
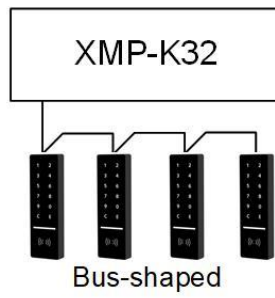
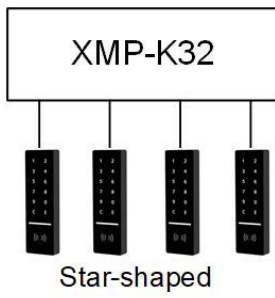
Following distances should be observed:



- Maximum distance between controller and reader 100 m with 12VDC and 200m with 24VDC.
- Cable type: 2x2x0.8mm (shielded)

Additional information's please see the access controller documentations.

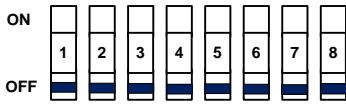
The connection can be realized star- or bus-shaped (Note fuse values!).



3.2 Connection of IP65 cable

Card reader	Cable
A	Blue
B	White
-	Black
+	Brown

4 Meaning of dip switch SW1

<p style="text-align: center;">Dip switch</p> <p style="text-align: center;">SW1</p> 	Description
SW1-1	SecuCrypt®: Bit 1, 2 and 3 for reader hardware address (0 to 7) OSDP™ V2: Bit 1, 2, 3 and 4 for reader hardware address (0 to 15)
SW1-2	
SW1-3	
SW1-4	
SW1-5	Reserved
SW1-6	Activate OSDP™ V2 Crypto
SW1-7	Addressing via software (W3XMPCR)P)
SW1-8	Boot loader-Mode active (Service only)



IP65 version does not have a dip switch.



The card reader can be addressed via the XMP-BABYLON software.



The card reader can be addressed via configuration card.



The baud rate is determined automatically (autosensing).

The reader address is set on the micro-switches 1-3 in binary form as follows:

SecuCrypt®

Dip 1	Dip 2	Dip 3	Address
Off	Off	Off	0
On	Off	Off	1
Off	On	Off	2
On	On	Off	3
Off	Off	On	4
On	Off	On	5
Off	On	On	6
On	On	On	7

OSDP™ V2 (Crypto)

Dip 1	Dip 2	Dip 3	Dip 4	Address
Off	Off	Off	Off	0
On	Off	Off	Off	1
Off	On	Off	Off	2
On	On	Off	Off	3
Off	Off	On	Off	4
On	Off	On	Off	5
Off	On	On	Off	6
On	On	On	Off	7
Off	Off	Off	On	8
On	Off	Off	On	9
Off	On	Off	On	10
On	On	Off	On	11
Off	Off	On	On	12
On	Off	On	On	13
Off	On	On	On	14
On	On	On	On	15

5 Meaning of the LEDs

The reader status is displayed with 3 LEDs.

LED state	Description
2x RGB LED – front left outside	Free configurable
2x RGB LED – front left center	Free configurable
2x RGB LED – front right center	Free configurable
2x RGB LED – front right outside	Free configurable
Reverse side D4:	SAM activated
Reverse side D8	Communication TXD
Reverse side D9	Communication RXD

6 SAM Socket (Secure Access Module)

For customer-specific solutions, the card reader provides a SAM socket.



For detailed information, please contact the customer support of AUTECH Gesellschaft für Automationstechnik mbH.

7 Details of reading technology

7.1 13,56 MHz - MIFARE Classic® & MIFARE® DESFire® EV1/EV2/EV3

The XMP-TMC2150/60 and XMP-TMC2170/80 reads the serial number or memory information's of MIFARE® DESFire® EV1/EV2/EV3 and MIFARE Classic® badges. In case of MIFARE Classic® badges the serial number (UID) will be transmitted as decimal value (e.g. *40004403886360* by *4-byte UID*) or hexadecimal (e.g. *800A345CB1986A* by *7-byte UID*) and MIFARE® DESFire® EV1/EV2 badges as 7-byte hexadecimal (e.g. *801B76A1726F04*) in 14 digits. The factory settings read the serial number.

The special parameter settings will be downloaded via the utility program **W3XMPCR** or **U3XMPCR**.

As communication protocol the **SecuCrypt®2.0** or **OSDO™ V2 Crypto** is recommended.



Recommended card type: ISO cards



The XMP-TMC2170/80 needs the license XMP-TMC2170-F5.

7.2 13,56 MHz - LEGIC® prime & advant

The XMP-TMC2170/2180 reads the serial number (UID) or segments information's of LEGIC® prime and advent badges. Project specific settings like CRC check, segment number, search-string and so on must be defined by the installer. Maybe the need of SAM cards is required.

The special parameter settings will be downloaded via the utility program **W3XMPCR** or **U3XMPCR**.

As communication protocol the **SecuCrypt®2.0** or **OSDO™ V2 Crypto** is recommended.



Recommended card type: ISO cards



The XMP-TMC2170/80 needs the license XMP-TMC3070-F1.

7.3 13,56 MHz – HID iCLASS®

The XMP-TMC2170/2180 reads the serial number (e.g. E012FFFB00CED8) or the badge number of HID iCLASS® cards, which are encoded for Corporate 1000 (35 Bit format),

The special parameter settings will be downloaded via the utility program **W3XMPCR** or **U3XMPCR**.

As communication protocol the **SecuCrypt®2.0** or **OSDO™ V2 Crypto** is recommended.



Recommended card type: ISO cards



The SIE-TMC2170/80 needs the license XMP-TMC2170-F6.

7.4 Reading distances

MIFARE Classic®	MIFARE® DESFire® EV1/EV2/EV3	LEGIC® prime	LEGIC® advant	HID iCLASS®
0 to 6 cm	0 to 6 cm	0 to 6 cm	0 to 6 cm	0 to 3 cm



Metal parts in a distance of 120 mm can reduce the reading distance



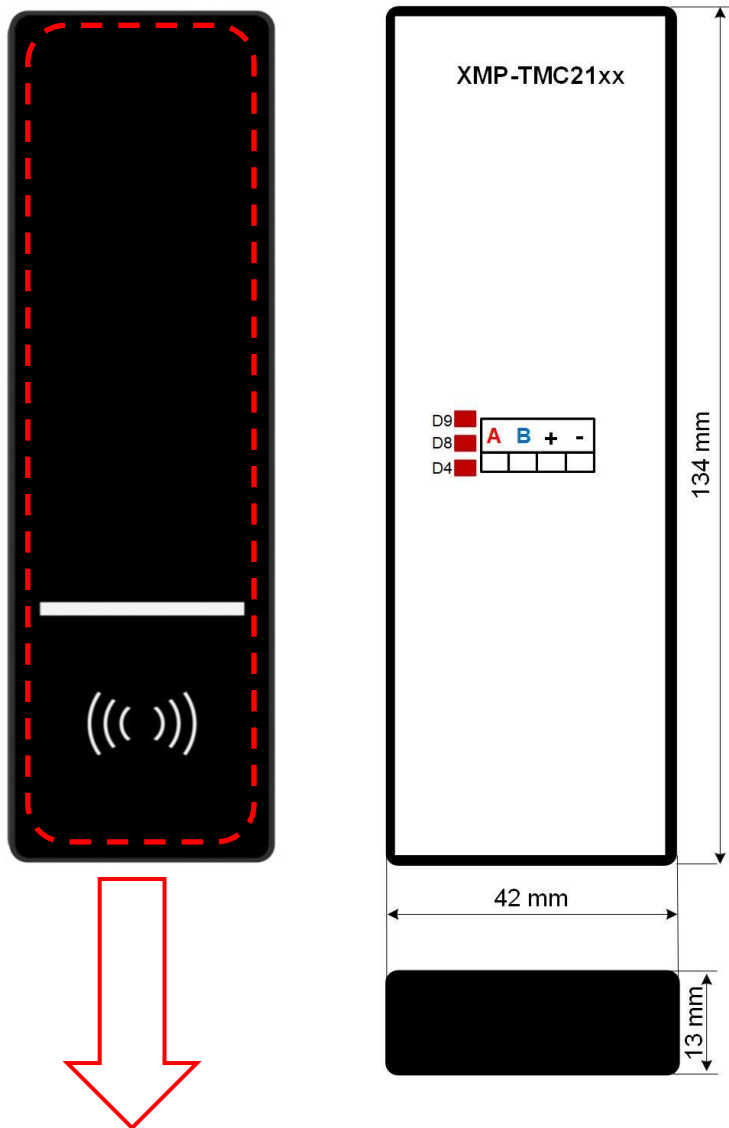
The distance between two installed card readers should be minimum 20 cm, because of the fact, that the electro-magnetic fields of the readers - concerning the reading distances - affect each other in disadvantageous way.



The reading distance depending on the encryption, quality and antenna of the RFID card or fob.

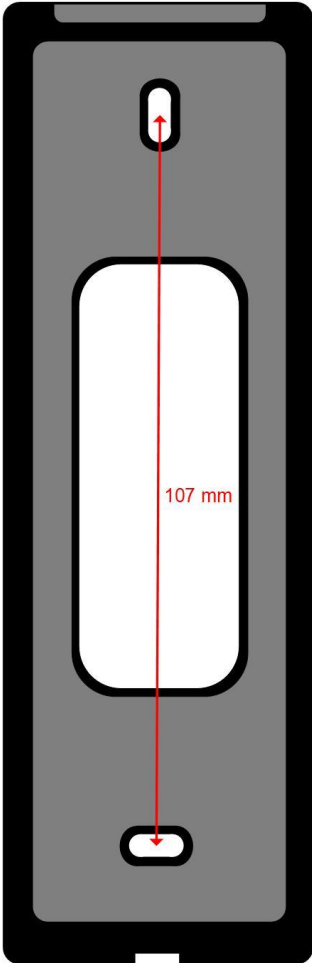
8 Reader view / Mounting

8.1 RFID field and dimension



The red line shows the RFID field

8.2 Mounting frame



9 Compliances

FCC INFORMATION (U.S.A.)

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:



- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that of which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Warning Statement:

[Any] changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radio Frequency Exposure:

WARNING: To comply with RF exposure limits the users must keep separation distance from the device, except during the identification and operation process at the device (e.g. PIN-code input), which must be performed as described.

FCC ID: 2A6AAXMP2150
 This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device must not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.



This product is in conformity with the following EC directives, including all applicable amendments:

- 2014/53/EU (Radio Equipment Directive)



This product is in conformity with the listed UK statutory requirements and designated standards:

Electromagnetic Compatibility Regulations 2016

10 Document History

Version	Date	Description
V1.0	21.07.2021	First release
V1.1	09.01.2023	RAL colors and short text
V1.2	19.04.2024	Minor changes Added XMP-TMC2170/80
V1.3	06.06.2024	FCC relevant content added

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Since mistakes - in spite of all efforts - cannot be avoided completely, we appreciate hints at any time.

The installation recommendations gained in this manual presume the most favorable general conditions. AUTECH gives no guarantee for the perfect function of an installation in system foreign environments.

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