



myTEM Roja IF
MTRQJ-100-RF

The myTEM Roja IF is used to integrate the rojaflex tubular motors of the ELFIS and ELFIM series and the external radio receiver RUE-1 in the complete myTEM Smart home world. Thus, the entire system is ready for remote access.

Together with a myTEM server, the Roja IF controls the rojaflex tubular motors with integrated receivers (ELFIS / ELFIM) and the external radio receiver RUE-1. The tubular motors can be integrated with the myTEM ProgTool or directly with the myTEM App via the myTEM Manager in the App Setup Mode.

Further information can be found on our website:
www.mytem-smarthome.com/web/en/downloads/



ATTENTION:

This device is not a toy. Please keep it away from children and animals!

Please read the manual before attempting to install the device!

These instructions are part of the product and must remain with the end user.

Warning and safety instructions

WARNING!

This word indicates a hazard with a risk that, if not avoided, can result in death or serious injury. Work on the device must only be carried out by persons with the necessary training or instruction.

CAUTION!

This word warns of possible damage to property.

SAFETY INSTRUCTIONS

- Operate this device only as described in the manual.
- Do not operate this device if it has obvious damage.
- This device shall not be altered, modified or opened.
- This device is intended for use in buildings in a dry, dust-free location.
- This device is intended for installation in a control cabinet. After installation, it should not be openly accessible.

DISCLAIMER

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rojaflex is a registered trademark of Schoenberger Germany Enterprises GmbH & Co. KG

Product description

The myTEM Roja IF MTRQJ-100-RF is a bidirectional radio interface on the frequency 433.92 MHz between the myTEM Smart home products and tubular motors with integrated (series ELFIS, ELFIM) or external radio receivers (RUE-1) from rojaflex.

The myTEM Roja IF is powered by 5 VDC via the USB type C connector and connected to a myTEM Radio Server or myTEM Smart Server via the CAN bus. The device can be placed on a horizontal surface or attached to a wall with the enclosed wall clip.

Installation

WARNING! Depending on national safety standards, only authorized and/or trained technicians may be allowed to make electrical installations on the power supply. Please inform yourself about the legal situation before installation.

CAUTION! Place your device as centrally as possible in your house or apartment.

CAUTION! When planning, consider the placement of all devices in relation to the radio range to avoid weak signals and sources of interference. Weak signals can be

caused by furniture, plants and especially walls, ceilings or metal objects that are located between the devices with a radio connection.

CAUTION! Keep devices at least 50 cm away from sources of interference. Possible sources of interference are electrical devices such as microwave ovens or computers.

Please install the device according to the following steps:

- Connect the device to your myTEM Radio Server with the supplied CAN cable. Alternatively, a CAN connection to a built-in myTEM Smart Server is possible. Please contact a trained technician for this case.
- Connect the device to the power supply via the USB cable and plug it securely into a power outlet.

CAUTION! To avoid tripping, install your cables barrier-free and make sure the power outlet and network devices are easily accessible.

CAUTION! If, instead of the supplied CAN cable, a separate connection is made to the CAN interface, the new cable must be attached with the correct polarity (+/-) including the ground (L to GND). A missing ground connection can affect the communication.

Note to terminating resistor

The myTEM Server (myTEM Radio Server or myTEM Smart Server) and the myTEM Roja IF have integrated bus-terminating resistors. If you use other myTEM CAN bus devices in the system, please wire in such a way that the myTEM Server is connected as the first device and the myTEM Roja IF as the last device (in bus topology).

Adding a rojaflex radio motor

The myTEM server automatically detects the myTEM Roja IF and it can be selected as soon as it is detected via the CAN bus. Set the server to the "Add" mode (see Server instructions for more information) and it will search for the radio command of the rojaflex radio hand-held transmitter. Press the stop button on the radio hand-held transmitter for the corresponding motor. The myTEM Roja IF stores the signal of the radio hand-held transmitter and uses this control signal for the radio motor respectively.

LED display

The LED's show the following states:

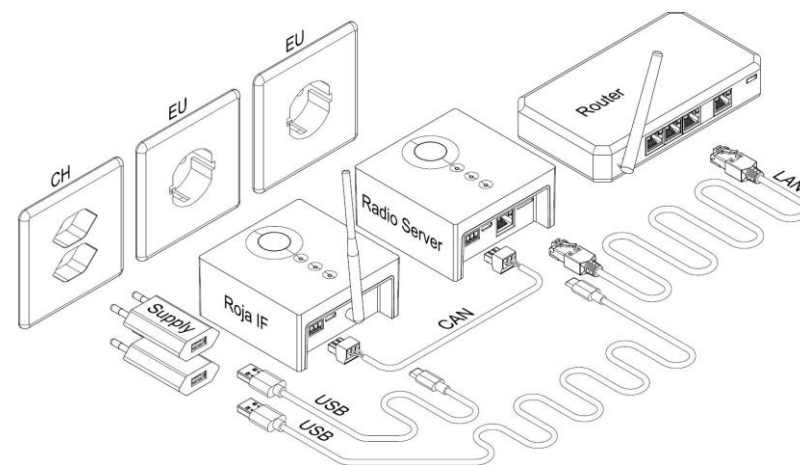
- LED 1:** RF-LED (Roja radio) flashes when a telegram is sent to the rojaflex actuators.
- LED 2:** CAN LED is light when the Roja IF is successfully connected to a Radio Server or Smart Server via CAN.
- LED 3:** Power LED is light when the device is started and ready for operation.

Button

The button can be used to test the radio link. Commands are sent to all tubular motors integrated in the system.

If the button is pressed briefly once, the blinds / shutters close. If the button is pressed twice briefly, the blinds / shutters open. If the button is pressed longer, the movements are stopped.

NOTE! Works only in conjunction with a server.



Wall mounting

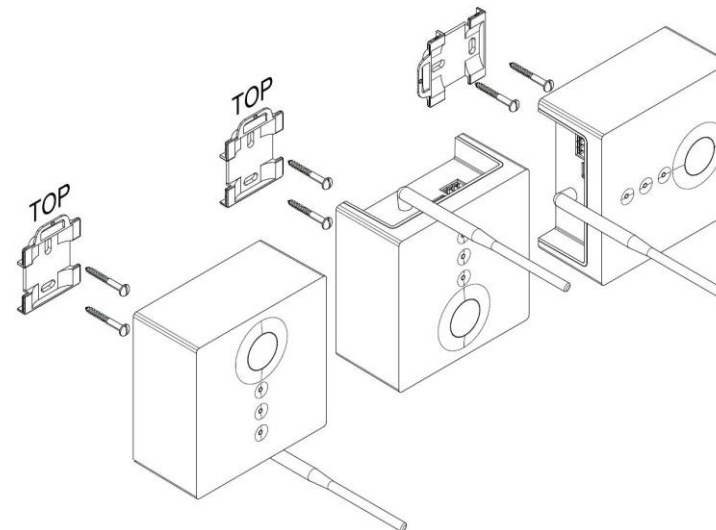
The device is most often placed on a horizontal surface, but it is also possible to attach the device to a wall with the enclosed wall clip. Before you start, please check in which direction you want to lead the connection cables away, i.e. downwards, upwards or horizontal. The device is only suitable for mounting at heights ≤ 2 m.

CAUTION! If the cables should lead upwards or downwards, the wall clip must be fastened in both cases with the lettering "TOP" upwards.

CAUTION! If the cables should lead to a side, please ensure that there is sufficient distance to obstacles so that the device can still be attached to the wall clip.

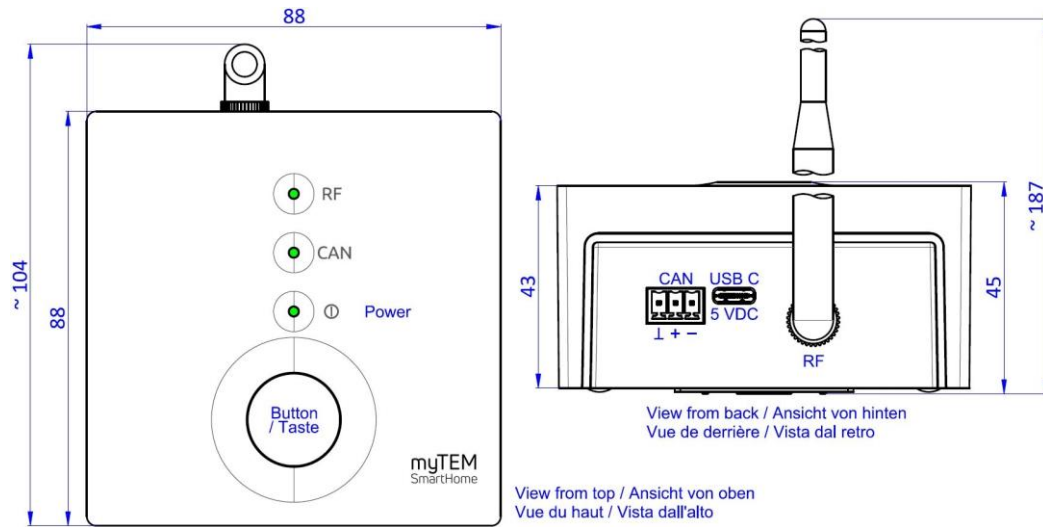
NOTE! For wall mounting you also need two dowels with Ø5.0 mm and two screws with flat heads Ø3.0 x 25 mm as fastening material (not enclosed).

- Press the wall clip in the desired orientation/position against the wall and mark the mounting holes. Alternatively, you can mark two positions vertically or horizontally with a distance of 24 mm.
- Drill at the marked positions with Ø5.0 mm, approx. 30 mm deep and then press the dowels completely in.
- Attach the wall clip with the two screws.
- Plug the device onto the wall clip and slide it until the spring clip clicks into its place.



Parts of the Roja IF

- The LED's provide information about radio communication, the availability of CAN communication and the operational readiness of the device.
- The function of the button is described above.
- USB type C connector for 5V power supply of the device.
- CAN interface for connection to the myTEM Servers, such as Radio Server or Smart Server.
- Radio antenna rotatable and tiltable for the frequency 433.92 MHz



Technical specifications

Dimensions (W x H x D)	88 x 88 x 45 mm without antenna	88 x 104 x 187 mm with vertical antenna	
Installation / mounting	On a horizontal surface or wall mounted		
Operating voltage USB supply	110 - 230 VAC ± 10%, 50/60Hz		
Operating voltage device	5 VDC ± 5% over USB type C connector		
Power consumption in standby	Continuous operation for wireless network, therefore no standby operation		
Power consumption in operation	typical 0.13 W	briefly (< 0.1 s) during communication 0.3 W	
Ambient temperature for operation	0 °C – 50 °C		
Ambient temperature for storage	-20 °C – 60 °C		
Ambient humidity	5 %RH – 85 %RH (non condensing)		
Wire cross-section CAN connector	0.2 mm ² – 1.5 mm ² / AWG 28 – 16		
Stripping length for connector	6.5 mm ± 0.5 mm		
Tightening torque for connector	0.2 Nm		
Protection class USB supply	II		
Overvoltage category USB supply	II		
Degree of protection of enclosure	IP 30	(according to EN 60529)	
Protection class device	III	(according to EN 62368-1)	
Overvoltage category device	I	(according to EN 62368-1, resp. EN 60664-1)	
Pollution degree	2	(according to EN 62368-1)	
Electrical safety device	EN IEC 62368-1:2020 + A11:2020	EN 62479:2010	
EMC device	EN 301 489-1 V2.2.3	EN 301 489-3 V2.3.2	
Radio spectrum	EN 300 220-2 V3.2.1		
Radio frequency	433.92 MHz		
RoHS	EN IEC 63000:2018		
CE conformity	CE	2014/35/EU (LVD)	2014/53/EU (RED)
		2014/30/EU (EMC)	2011/65/EU (RoHS)