

TWN4 Palon Compact family

TWN4 Palon Compact M

TWN4 Palon Compact M Light

TWN4 Palon Compact LEGIC M

TWN4 Palon Compact LEGIC M Light

TWN4 Palon Compact Panel

TWN4 Palon Compact Panel Light

TWN4 Palon Compact LEGIC Panel

TWN4 Palon Compact LEGIC Panel Light

TWN4 Palon Compact Wall

TWN4 Palon Compact Wall Light

TWN4 Palon Compact LEGIC Wall

TWN4 Palon Compact LEGIC Wall Light

USER MANUAL

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1 INTRODUCTION

1.1 ABOUT THIS MANUAL

This user manual is intended for the user and enables safe and appropriate handling of the product. It gives a general overview, as well as important technical data and safety information about the product. Before using the product, the user should read and understand the content of this manual.

For the sake of better understanding and readability, this manual might contain exemplary pictures, drawings and other illustrations. Depending on your product configuration, these pictures might differ from the actual design of your product.

The original version of this manual has been written in English. Wherever the manual is available in another language, it is considered as a translation of the original document for information purposes only. In case of discrepancy, the original version in English will prevail.

1.2 ELATEC SUPPORT

In case of any technical questions or product malfunction, refer to the ELATEC website (www.elatec.com) or contact ELATEC technical support at **support-rfid@elatec.com**

In case of questions regarding your product order, contact your Sales representative or ELATEC customer service at **info-rfid@elatec.com**

2 SAFETY INFORMATION

Transport and storage

- Carefully observe the transport and storage conditions described on the product packaging or other relevant product documents (e.g. data sheet).

Unpacking and installation

- Before unpacking and installing the product, this manual and all relevant installation instructions must be read carefully and understood.
- The product might show sharp edges or corners and requires a particular attention during the unpacking and installation.
Unpack the product carefully and do not touch any sharp edges or corners, or any sensitive components on the product.
If necessary, wear safety gloves.
- After unpacking the product, check that all components have been delivered according to your order and delivery note.
Contact ELATEC if your order is not complete.
- In case the product is equipped with a cable, do not twist or pull the cable excessively.
- In case the product is equipped with a cable, the cable may not be replaced or extended.
ELATEC excludes any liability for damages or injuries resulting from the use of the product with a cable extension or a replaced cable.
- The product is an electronic device whose installation requires specific skills and expertise.
The installation of the product should be done by trained and qualified personnel only.

Handling

- To comply with the applicable RF exposure requirements, the product should be installed and operated with a minimum distance of 20 cm to any user's/nearby person's body at all times. Refer to Chapter "Compliance statements" for further information about RF exposure compliance.
- Depending on your product configuration, the product might be equipped with one or more light-emitting diodes (LED).
Avoid direct eye contact with the blinking or steady light of the light-emitting diodes.
- The product has been designed for use under specific conditions, e.g. in a specific temperature range (refer to the product data sheet).
Any use of the product under different conditions might damage the product or alter its reading performance.
- The use of other RFID devices in direct vicinity to the product, or in combination with the product might damage the product or alter its reading performance. In case of doubts, contact ELATEC for more information.
- The user is liable for the use of spare parts or accessories other than the ones sold or recommended by ELATEC.
ELATEC excludes any liability for damages or injuries resulting from the use of spare parts or accessories other than the ones sold or recommended by ELATEC.

- Like most electronic devices, RFID systems generate electromagnetic waves that can vary in amplitude and frequency. It is generally known and accepted that some RFID devices might potentially interfere with personal medical devices, like pacemakers or hearing aids. **The RFID readers/modules of the TWN4 Palon Compact family fulfill general radio and EMC requirements. However, users with a pacemaker or any other medical device should use the readers/modules carefully and refer to the information given by the manufacturer of their medical devices before using the readers/modules or any host device containing the readers/modules.**

Maintenance and cleaning

- Any repair or maintenance work should be done by trained and qualified personnel only. **Do not try to repair or carry out any maintenance work on the product by yourself. Do not allow any repair or maintenance work on the product by an unqualified or unauthorized third party.**
- The RFID readers/modules of the TWN4 Palon Compact family do not need any special cleaning. However, the housing of the RFID readers may be carefully cleaned up with a soft, dry cloth and a non-aggressive or non-halogenated cleaning agent on the outer surface only.
 - **Make sure that the cloth and cleaning agent used to clean up the housing of TWN4 Palon Compact readers do not damage the product or its components (e.g. label(s)).**
 - **Do not use any detergents or other cleaning agents on the TWN4 Palon Compact RFID modules.**

Disposal

- The product must be disposed of in accordance with applicable local regulations.

Product modifications

- The product has been designed, manufactured and certified as defined by ELATEC. **Any product modification without prior written approval from ELATEC is prohibited and considered improper use of the product. Unauthorized product modifications may also result in the loss of product certifications.**

If you are unsure about any part of the safety information above, contact ELATEC support.

Any failure to comply with the safety information given in this document is considered improper use. ELATEC excludes any liability in case of improper use or faulty product installation.

3 PRODUCT DESCRIPTION

3.1 INTENDED USE

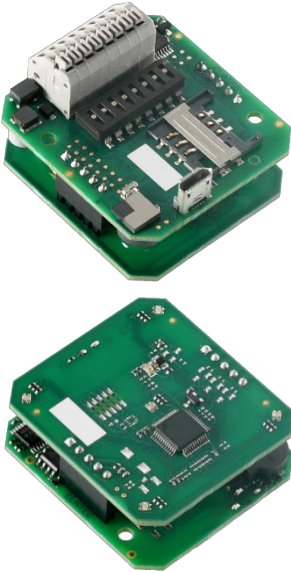
The RFID readers and modules of the TWN4 Palon Compact family allow users to read and write RFID media in the 125 kHz (LF) and 13.56 MHz (HF) frequency bands. In addition, some devices also support the BLE (2.4 GHz) technology. The readers of the TWN4 Palon Compact Wall series are for indoor use only, whereas the TWN4 Palon Compact M RFID modules are intended to be integrated into a host device. When integrated into the Panel housing (TWN4 Palon Compact Panel series), the modules are for both indoor and outdoor use. All devices must be used in environmental conditions according to the respective product data sheets and installation instructions related to the products.

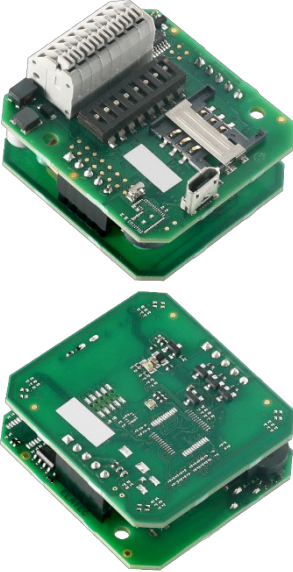
Any use other than the intended use described in this section, as well as any failure to comply with the safety information given in this document, is considered improper use. ELATEC excludes any liability in case of improper use or faulty product installation.

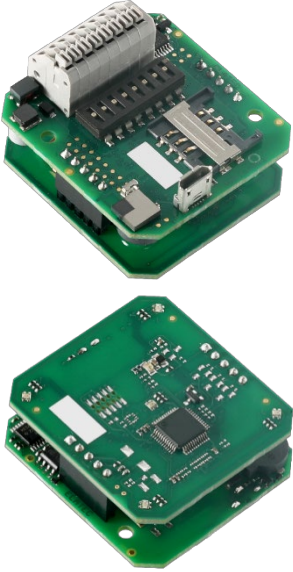
3.2 PRODUCT FAMILY

The TWN4 Palon Compact family contains the following RFID devices:

3.2.1 TWN4 PALON COMPACT M SERIES

TWN4 Palon Compact M	
	Frequencies 125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
	Antennas Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179 Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3 Bluetooth Low Energy Integrated BLE chip
	Dimensions (L x W x H) Approx. 40.65 x 43.85 x 27.80 mm / 1.60 x 1.73 x 1.09 inch
	Power Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
Current consumption Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.	
Temperature ranges Operating: -25 °C up to +80 °C / -13 °F up to +176 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F	
Relative humidity 5% to 95% non-condensing	
R/W distance LF and HF: up to 100 mm / 4 inch, depending on environment and transponder BLE: up to several meters/feet	
MTBF 500,000 hours	
Weight Approx. 25 g / 0.88 oz	

TWN4 Palon Compact M Light	
	Frequencies 125 kHz (LF) / 13.56 MHz (HF)
	Antennas Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179 Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3
	Dimensions (L x W x H) Approx. 40.65 x 43.85 x 27.80 mm / 1.60 x 1.73 x 1.09 inch
	Power Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
	Current consumption Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.
	Temperature ranges Operating: -25 °C up to +80 °C / -13 °F up to +176 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F
	Relative humidity 5% to 95% non-condensing
	R/W distance LF and HF: up to 100 mm / 4 inch, depending on environment and transponder
	MTBF 500,000 hours
	Weight Approx. 25 g / 0.88 oz

TWN4 Palon Compact LEGIC M	
	Frequencies 125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
	Antennas Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179 Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3 Bluetooth Low Energy Integrated BLE chip
	Dimensions (L x W x H) Approx. 40.65 x 43.85 x 27.80 mm / 1.60 x 1.73 x 1.09 inch
	Power Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
	Current consumption Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.
	Temperature ranges Operating: -25 °C up to +80 °C / -13 °F up to +176 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F
	Relative humidity 5% to 95% non-condensing
	R/W distance LF and HF: up to 100 mm / 4 inch, depending on environment and transponder BLE: up to several meters/feet
	MTBF 500,000 hours
	Weight Approx. 25 g / 0.88 oz

TWN4 Palon Compact LEGIC M Light



Frequencies	125 kHz (LF) / 13.56 MHz (HF)
Antennas	Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179 Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3
Dimensions (L x W x H)	Approx. 40.65 x 43.85 x 27.80 mm / 1.60 x 1.73 x 1.09 inch
Power	Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
Current consumption	Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.
Temperature ranges	Operating: -25 °C up to +80 °C / -13 °F up to +176 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F
Relative humidity	5% to 95% non-condensing
R/W distance	LF and HF: up to 100 mm / 4 inch, depending on environment and transponder
MTBF	500,000 hours
Weight	Approx. 25 g / 0.88 oz

3.2.2 TWN4 PALON COMPACT PANEL SERIES

TWN4 Palon Compact Panel



Frequencies	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
Antennas	Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179 Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3 Bluetooth Low Energy Integrated BLE chip
Dimensions (L x W x H)	Approx. 82.00 x 82.00 x 34.20 mm / 3.23 x 3.23 x 1.35 inch
Power	Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
Current consumption	Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.
Temperature ranges	Operating: -25 °C up to +80 °C / -13 °F up to +176 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F
Relative humidity	IP65 protected housing (frontside, when mounted) 5% to 95% non-condensing
R/W distance	LF and HF: up to 100 mm / 4 inch, depending on environment and transponder BLE: up to several meters/feet
MTBF	500,000 hours
Weight	Approx. 77 g / 2.72 oz

TWN4 Palon Compact Panel Light



Frequencies	125 kHz (LF) / 13.56 MHz (HF)
Antennas	Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179 Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3
Dimensions (L x W x H)	Approx. 82.00 x 82.00 x 34.20 mm / 3.23 x 3.23 x 1.35 inch
Power	Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
Current consumption	Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.
Temperature ranges	Operating: -25 °C up to +80 °C / -13 °F up to +176 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F
Relative humidity	IP65 protected housing (frontside, when mounted) 5% to 95% non-condensing
R/W distance	LF and HF: up to 100 mm / 4 inch, depending on environment and transponder
MTBF	500,000 hours
Weight	Approx. 77 g / 2.72 oz

TWN4 Palon Compact LEGIC Panel



Frequencies	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
Antennas	Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179 Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3 Bluetooth Low Energy Integrated BLE chip
Dimensions (L x W x H)	Approx. 82.00 x 82.00 x 34.20 mm / 3.23 x 3.23 x 1.35 inch
Power	Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
Current consumption	Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.
Temperature ranges	Operating: -25 °C up to +80 °C / -13 °F up to +176 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F
Relative humidity	IP65 protected housing (frontside, when mounted) 5% to 95% non-condensing
R/W distance	LF and HF: up to 100 mm / 4 inch, depending on environment and transponder BLE: up to several meters/feet
MTBF	500,000 hours
Weight	Approx. 77 g / 2.72 oz

TWN4 Palon Compact LEGIC Panel Light




Frequencies	125 kHz (LF) / 13.56 MHz (HF)
Antennas	<p>Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179</p> <p>Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3</p>
Dimensions (L x W x H)	<p>Approx.</p> <p>82.00 x 82.00 x 34.20 mm / 3.23 x 3.23 x 1.35 inch</p>
Power	<p>Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A</p>
Current consumption	<p>Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.</p>
Temperature ranges	<p>Operating: -25 °C up to +80 °C / -13 °F up to +176 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F</p>
Relative humidity	IP65 protected housing (frontside, when mounted) 5% to 95% non-condensing
R/W distance	LF and HF: up to 100 mm / 4 inch, depending on environment and transponder
MTBF	500,000 hours
Weight	Approx. 77 g / 2.72 oz

3.2.3 TWN4 PALON COMPACT WALL SERIES

TWN4 Palon Compact Wall	
Frequencies	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
Antennas	<p>Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179</p> <p>Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3</p> <p>Bluetooth Low Energy Integrated BLE chip</p>
Dimensions (L x W x H)	<p>Reader with front lid and white standard frame Approx. 80.50 x 80.50 x 36.50 mm / 3.17 x 3.17 x 1.44 inch</p> <p>Reader with front lid and without frame Approx. 71.00 x 71.00 x 32.90 mm / 2.80 x 2.80 x 1.30 inch</p> <p>Reader without front lid and without frame Approx. 71.00 x 71.00 x 30.80 mm / 2.80 x 2.80 x 1.22 inch</p>
Power	<p>Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A</p>
Current consumption	<p>Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.</p>
Temperature ranges	<p>Operating: -25 °C up to +70 °C / -13 °F up to +158 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F</p>
Relative humidity	IP54 protected housing (frontside, when mounted) 5% to 95% non-condensing
R/W distance	<p>LF and HF: up to 100 mm / 4 inch, depending on environment and transponder BLE: up to several meters/feet</p>
MTBF	500,000 hours
Weight	Approx. 61.20 g / 2.16 oz

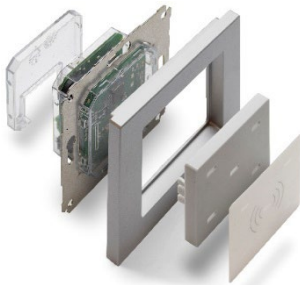


TWN4 Palon Compact Wall Light

	Frequencies	125 kHz (LF) / 13.56 MHz (HF)	
	Antennas	Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179 Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3	
	Dimensions (L x W x H)	Reader with front lid and white standard frame Approx. 80.50 x 80.50 x 36.50 mm / 3.17 x 3.17 x 1.44 inch Reader with front lid and without frame Approx. 71.00 x 71.00 x 32.90 mm / 2.80 x 2.80 x 1.30 inch Reader without front lid and without frame Approx. 71.00 x 71.00 x 30.80 mm / 2.80 x 2.80 x 1.22 inch	
		Power	Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
		Current consumption	Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.
	Temperature ranges	Operating: -25 °C up to +70 °C / -13 °F up to +158 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F	
	Relative humidity	IP54 protected housing (frontside, when mounted) 5% to 95% non-condensing	
	R/W distance	LF and HF: up to 100 mm / 4 inch, depending on environment and transponder	
	MTBF	500,000 hours	
	Weight	Approx. 61.20 g / 2.16 oz	

TWN4 Palon Compact LEGIC Wall

Frequencies	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
Antennas	<p>Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179</p> <p>Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3</p> <p>Bluetooth Low Energy Integrated BLE chip</p>
Dimensions (L x W x H)	<p>Reader with front lid and white standard frame Approx. 80.50 x 80.50 x 36.50 mm / 3.17 x 3.17 x 1.44 inch</p> <p>Reader with front lid and without frame Approx. 71.00 x 71.00 x 32.90 mm / 2.80 x 2.80 x 1.30 inch</p> <p>Reader without front lid and without frame Approx. 71.00 x 71.00 x 30.80 mm / 2.80 x 2.80 x 1.22 inch</p>
Power	<p>Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A</p>
Current consumption	<p>Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.</p>
Temperature ranges	<p>Operating: -25 °C up to +70 °C / -13 °F up to +158 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F</p>
Relative humidity	<p>IP54 protected housing (frontside, when mounted) 5% to 95% non-condensing</p>
R/W distance	<p>LF and HF: up to 100 mm / 4 inch, depending on environment and transponder BLE: up to several meters/feet</p>
MTBF	500,000 hours
Weight	Approx. 61.20 g / 2.16 oz



TWN4 Palon Compact LEGIC Wall Light	
Frequencies	125 kHz (LF) / 13.56 MHz (HF)
Antennas	Integrated RFID LF antenna Dimensions: 27.00 x 27.50 mm / 1.06 x 1.08 inch Number of turns: 179 Integrated RFID HF antenna Dimensions: 39.00 x 42.50 mm / 1.54 x 1.67 inch Number of turns: 3
Dimensions (L x W x H)	Reader with front lid and white standard frame Approx. 80.50 x 80.50 x 36.50 mm / 3.17 x 3.17 x 1.44 inch Reader with front lid and without frame Approx. 71.00 x 71.00 x 32.90 mm / 2.80 x 2.80 x 1.30 inch Reader without front lid and without frame Approx. 71.00 x 71.00 x 30.80 mm / 2.80 x 2.80 x 1.22 inch
Power	Micro USB: 4.3 V – 5.5 V Connector X1: 9.0 V – 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
Current consumption	Operating: 160 mA @ 12 V typically Idle: 50 mA @ 12 V typ. Peak: 250 mA @ 12 V typ.
Temperature ranges	Operating: -25 °C up to +70 °C / -13 °F up to +158 °F Storage: -40 °C up to +85 °C / -40 °F up to +185 °F
Relative humidity	IP54 protected housing (frontside, when mounted) 5% to 95% non-condensing
R/W distance	LF and HF: up to 100 mm / 4 inch, depending on environment and transponder
MTBF	500,000 hours
Weight	Approx. 61.20 g / 2.16 oz



Refer to the data sheet of your product for additional technical specifications.

3.3 FIRMWARE

Your product is delivered ex-works with a specific firmware version, which is displayed on the product label.

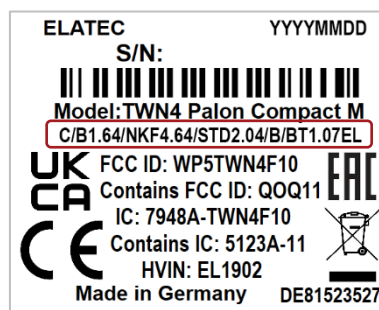


Fig. 1 - exemplary illustration

3.4 LABELING

The RFID readers and modules of the TWN4 Palon Compact family are delivered ex-works with a label (Fig. 1) attached on the rear side of the housing or directly on the module. This label contains important

product information (e.g. certification information) and may not be removed or damaged. In case of a label wear-out, contact ELATEC.

In addition, once an RFID module (TWN4 Palon Compact M series) has been integrated into a host device, the label might not be visible anymore. In this case, specific requirements related to the labeling of the host device might apply. For more information, refer to the integration manual of your RFID module and to the documentation related to the host device.

3.5 SCOPE OF DELIVERY

The RFID readers and modules of the TWN4 Palon Compact family are delivered as a kit with the following components:

3.5.1 TWN4 PALON COMPACT PANEL KITS



RFID module

Depending on the product configuration, a TWN4 Palon Compact Panel kit can be delivered with any RFID module of the TWN4 Palon Compact family (refer to Chapter “TWN4 Palon Compact M series”)



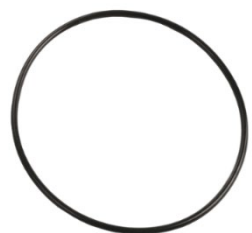
Housing kit

The housing kit delivered with TWN4 Palon Compact Panel includes an IP65 protected, transparent polycarbonate housing, 2 inner holder clips and a black polycarbonate outer mounting frame.



Locknut

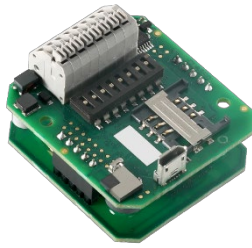
ABS locknut M63 x 1.5
Material: nylon



O-ring seal

Dimensions: 65.00 x 2.00 mm / 2.55 x 0.07 inch
Material: nitrile butadiene rubber (NBR)

3.5.2 TWN4 PALON COMPACT WALL KITS



RFID module

Depending on the product configuration, a TWN4 Palon Compact Wall kit can be delivered with any RFID module of the TWN4 Palon Compact family (refer to Chapter “TWN4 Palon Compact M series”).



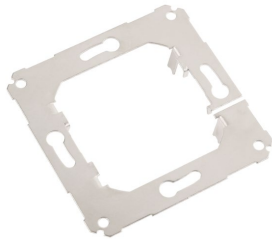
Housing

IP54 protected, transparent polycarbonate housing.



Rear lid

The transparent polycarbonate rear lid is an additional protection that can be removed to get access to the USB port on the RFID module pre-installed in the TWN4 Palon Compact Wall kit.



TWN4 Palon mounting ring

Metal mounting ring for DIN49073 EU flush mount wall boxes.



Front lid

The front lid has been designed for frames with 55 x 55 mm cutout and contains an IR reflector on the back side.

n/a

Frame¹

ELATEC offers different frames for standard configurations of TWN4 Palon Compact Wall kits. Contact ELATEC for more information.

¹ The frame is an optional component. Depending on your product configuration, it may not be included in your kit.



TWN4 Palon mounting ring screws
3.20 x 15.00 mm / 0.12 x 0.59 inch

In addition, ELATEC also offers cables of different types (e.g. USB) in various lengths for connecting the RFID readers and modules of the TWN4 Palon Compact family to the intended host devices.

Refer to the ELATEC website for more information about the available cables and accessories.

4 INSTALLATION

4.1 TWN4 PALON COMPACT M SERIES

The RFID modules of the TWN4 Palon Compact family are intended to be integrated into a host system. Refer to the integration manual of your RFID module for more information about the installation and electrical connection to the host device.

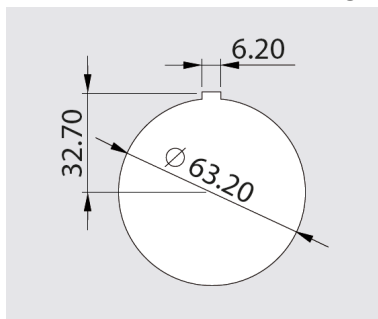
4.2 TWN4 PALON COMPACT PANEL SERIES

Before starting with the installation of a TWN4 Palon Compact Panel kit, make sure you have read and understood the following safety information:

- The installation of the reader should be done by trained and qualified personnel only.
- If you are unsure about any part of the following instructions, please contact ELATEC.
- The reader is to be installed and used in accordance with applicable electrical standards and regulations.
- Turn off power at all wires before you start the installation process. Make sure that power is turned off by testing the power supply of each wire. The reader may be supplied with power only after the installation has been completed.

In addition, the following information regarding the installation site and equipment needed for the installation must be observed:

- For connection with RS-232, RS-485², Wiegand or Clock/Data: conductor size 24 – 20 AWG, or 0.2 mm² – 0.5 mm² (corresponds to a diameter of 0.5 mm – 0.8 mm).
- For connection with USB: micro USB cable with B male plug.
- The recess on the mounting location must have the following dimensions:



Wall thickness: 1 mm – 17.5 mm

- A wire stripper tool is required for the electrical connection of the reader.
- Please be aware of the influence of metallic materials on or too close to the reader. These materials could reduce the reading performance of the reader.

² The use of the RS-485 interface requires a shielded cable.



Fig. 2 - exemplary illustration with black outer mounting frame and ELATEC standard inlay

4.2.1 WALL MOUNTING

Proceed as follows to install the reader on the wall:

1. Adjust the O-ring on the reader housing, then lead the O-ring over the foreseen notch.

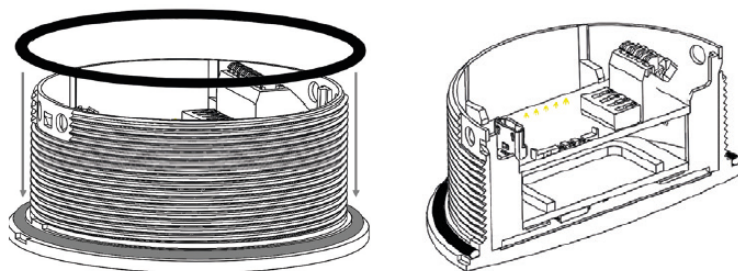


Fig. 3

2. Use the groove (marked in blue in Fig. 4) on the housing and the tongue (marked in green in Fig. 4) on the frame to connect the two parts.

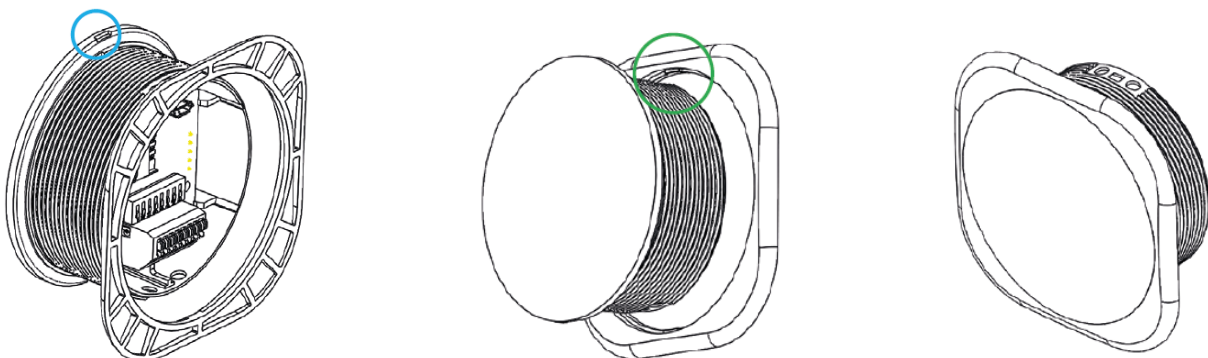


Fig. 4

3. Guide the thread of the housing through the recess. Make sure that the slot nut on the housing (marked in green in Fig. 5) is aligned with the slot of the recess (marked in blue in Fig. 5). To position the reader on the wall surface, lead the slot nut in the groove of the recess.

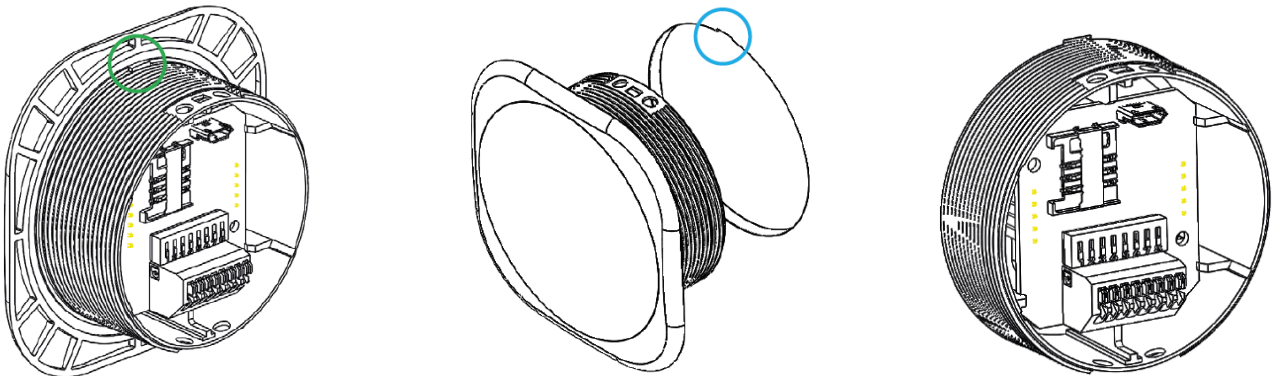


Fig. 5

4. Finally, fix the reader in its final position by turning the locknut over the thread.



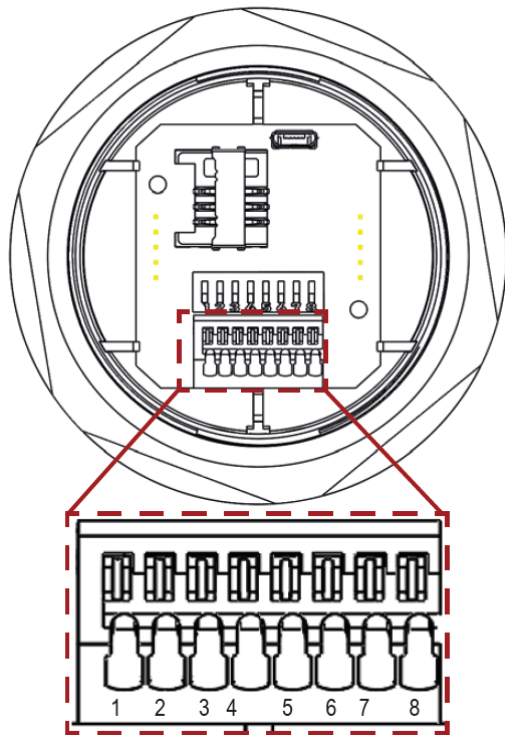
Fig. 6

4.2.2 ELECTRICAL CONNECTION

Before starting with the electrical connection of the reader, make sure you have read and understood the following safety information:

- Put the wires into proper position. The chosen length of the wires should protect the wire from stress after the installation has been completed.
- Prepare the wires for the connection to the reader. Use the wire stripper to remove the insulation. The recommended stripping length is 8 mm.
- For RS-485 usage: Set the DIP switches to the right position, depending on the required RS-485 parameters (address, speed, termination). Refer to Chapter "DIP switch positions" below for detailed information. Also, set the DIP 8 of the last reader in the RS-485 communication line to ON to terminate the line.
- Connect the wires to the connector and make sure the pins match the used interface. Refer to Chapter "Pin assignment" for detailed information. The push-in connector is designed for a tool-free connection of the wire ends.

4.2.2.1 PIN ASSIGNMENT



Pin	Assignment
1	RX
2	TX
3	A
4	B
5	TTL D0 or DATA
6	TTL D1 or CLOCK
7	VIN 9 – 30 V
8	GND

RS-232³

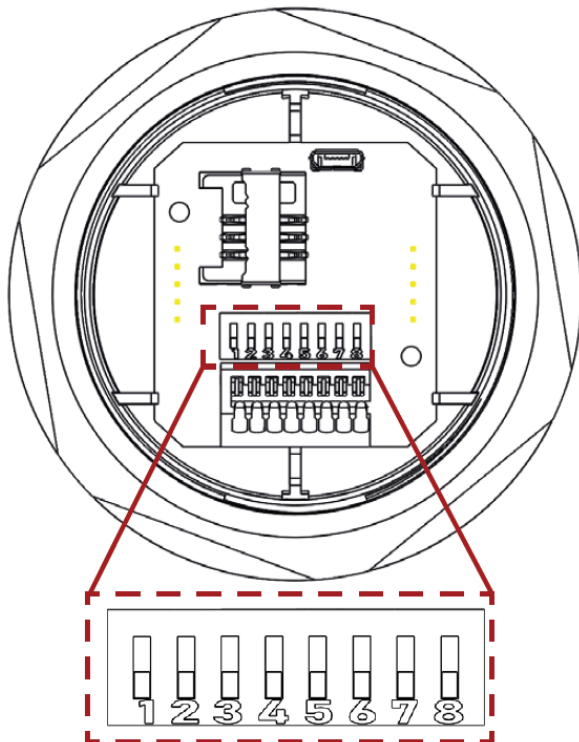
RS-485

Wiegand or Clock/Data

Supply voltage

4.2.2.2 DIP SWITCH POSITIONS

This chapter applies only to readers connected through the RS-485 interface.



DIP	Assignment
1	Address 0 LSB
2	Address 1
3	Address 2
4	Address 3 MSB
5	BIAS on/off
6	Speed 0
7	Speed 1
8	120 Ohm

RS-485

RS-485 termination

³ Optional (depending on the configuration)

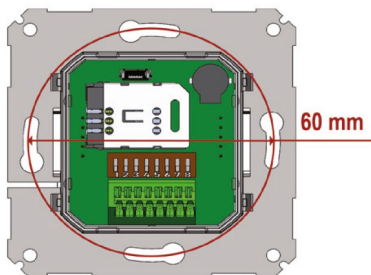
4.3 TWN4 PALON COMPACT WALL SERIES

Before starting with the installation of a TWN4 Palon Compact Wall kit, make sure you have read and understood the following safety information:

- The installation of the reader should be done by trained and qualified personnel only.
- If you are unsure about any part of the following instructions, please contact ELATEC.
- The reader is to be installed and used in accordance with applicable electrical standards and regulations.
- Turn off power at all wires before you start the installation process. Make sure that power is turned off by testing the power supply of each wire. The reader may be supplied with power only after the installation has been completed.

In addition, the following information regarding the installation site and equipment needed for the installation must be observed:

- For connection with RS-232, RS-485⁴, Wiegand or Clock/Data: conductor size 24 – 20 AWG, or 0.2 mm² – 0.5 mm² (corresponds to a diameter of 0.5 mm – 0.8 mm).
- For connection with USB: micro USB cable with B male plug.
- The flush mounted box in which the reader is intended to be installed must be in accordance with standard DIN 49073.



- A wire stripper tool is required for the electrical connection of the reader. In addition, a screwdriver (slot screwdriver or Philips screwdriver) is required to tighten the mounting screws delivered with the kit.
- The rear lid is mounted ex-works on the reader. When using the RS-485 interface, remove the rear lid from the housing by pressing the two hooks to loose the snap-fit connection. When using the micro USB interface, the rear lid cannot be mounted at the same time.
- Please be aware of the influence of metallic materials on or too close to the reader. These materials could reduce the reading performance of the reader.
- The reader is for indoor use only!

⁴ The use of the RS-485 interface requires a shielded cable.

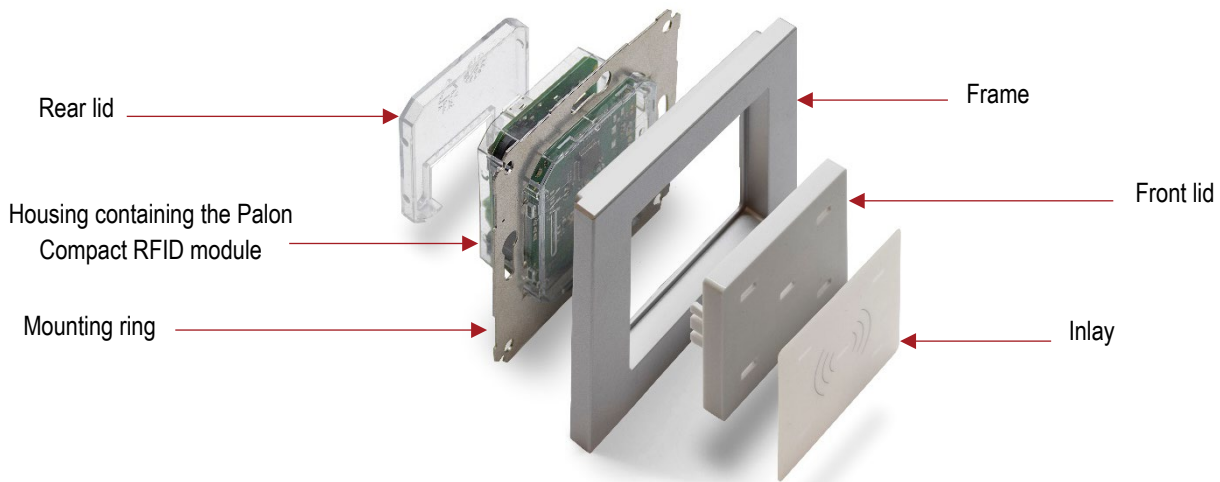


Fig. 7 - exemplary illustration with optional frame⁵ and ELATEC standard inlay

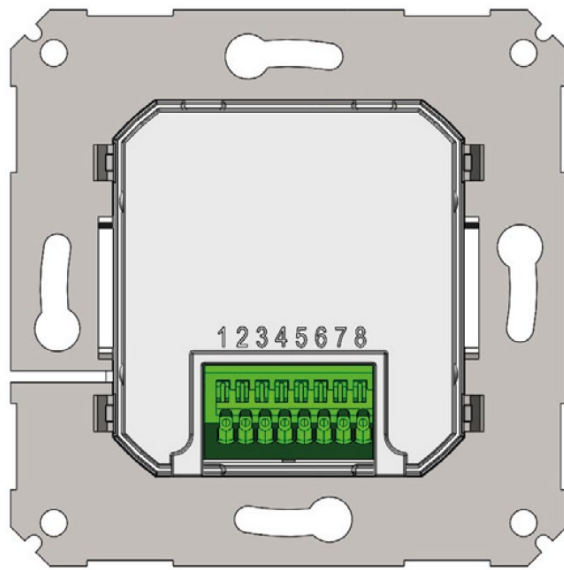
4.3.1 ELECTRICAL CONNECTION

Before starting with the electrical connection of the reader, make sure you have read and understood the following safety information:

- Put the wires into proper position. The chosen length of the wires should protect the wire from stress after the installation has been completed.
- Prepare the wires for the connection to the reader. Use the wire stripper to remove the insulation. The recommended stripping length is 8 mm.
- For RS-485 usage: Set the DIP switches to the right position, depending on the required RS-485 parameters (address, speed, termination). Refer to Chapter "DIP switch positions" below for detailed information. Also, set the DIP 8 of the last reader in the RS-485 communication line to ON to terminate the line.
- Connect the wires to the connector and make sure the pins match the used interface. Refer to Chapter "Pin assignment" below for detailed information. The push-in connector is designed for a tool-free connection of the wire ends.
- Do not connect the device to 230 V power lines!

⁵ The frame is an optional component. Depending on your product configuration, it may not be included in your kit.

4.3.1.1 PIN ASSIGNMENT

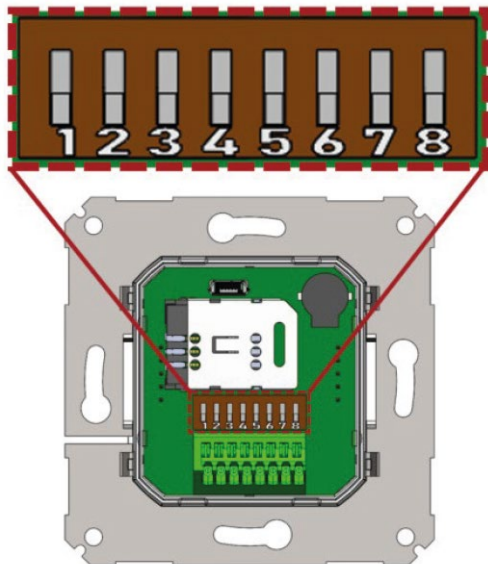


Pin	Assignment
1	RX
2	TX
3	A
4	B
5	TTL D0 or DATA
6	TTL D1 or CLOCK
7	VIN 9 – 30 V
8	GND

RS-232⁶
RS-485
Wiegand or Clock/Data
Supply voltage

4.3.1.2 DIP SWITCH POSITIONS

This chapter applies only to readers connected through the RS-485 interface.



DIP	Assignment
1	Address 0 LSB
2	Address 1
3	Address 2
4	Address 3 MSB
5	BIAS on/off
6	Speed 0
7	Speed 1
8	120 Ohm

RS-485
RS-485 termination

⁶ Optional (depending on the configuration)

4.3.2 WALL MOUNTING

Proceed as follows to install the reader on the wall:

1. Attach the rear lid to the backside of the housing by pressing it carefully into the snap-fit connection.

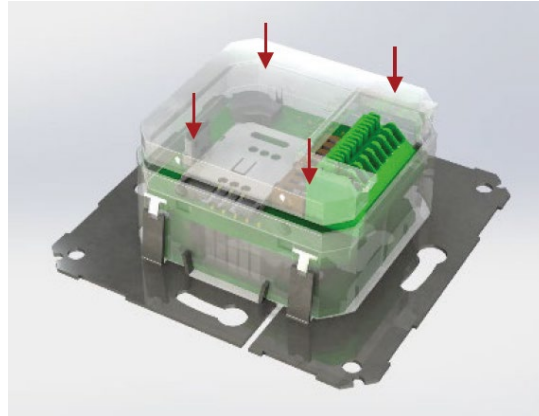


Fig. 8

2. Use the screws delivered with the kit to fix the reader on the flush mounted box. To accomplish that, guide the screws through the oblong holes and center them over the foreseen holes in the flush mounted box. Make sure that the reader is in the correct position before you tighten the screws.



You can use the electronic chip seen on the front side of the reader (marked in blue in Fig. 9) to check the orientation. The chip should be oriented to the top. Alternatively, the green wire connector on the rear side should be on the lower side.

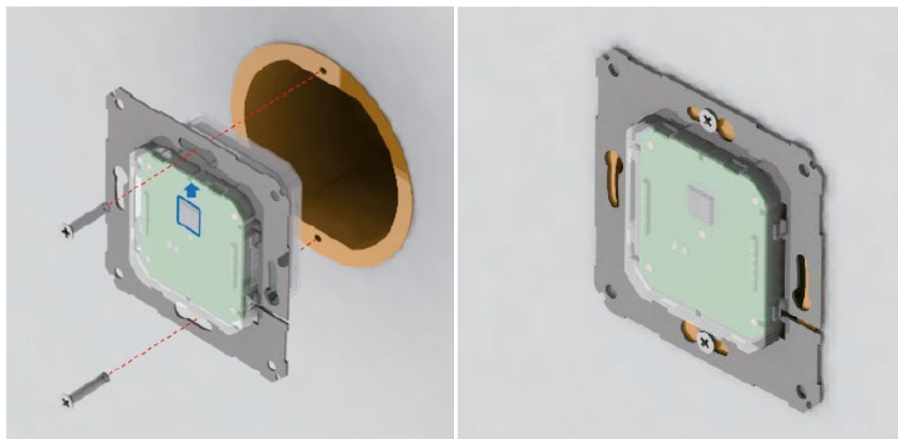


Fig. 9

Do not overtighten the screws to prevent damage to the metallic frame!

3. Place the frame on the front side of the device. To do so, use the rectangular recess for the reader in the frame. The backside of the frame should flush to the wall the reader is mounted on.

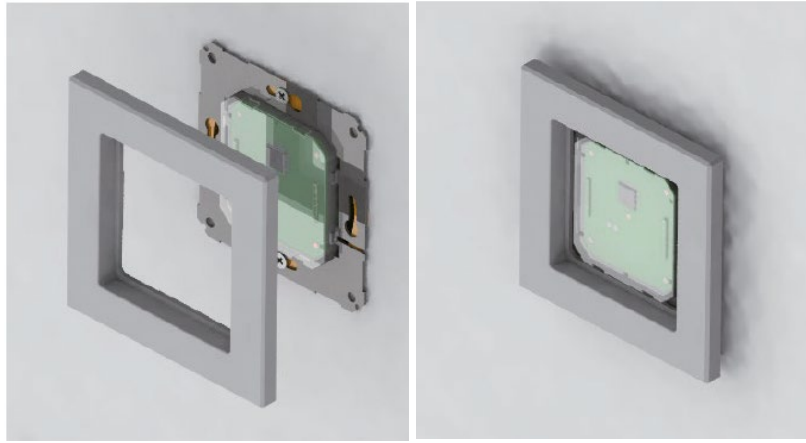


Fig. 10

Mind a gap between frame and wall to avoid that the frame gets removed accidentally.

4. Press the front lid against the front side of the housing until the dovetail snaps into place. The front lid presses against the design frame and makes sure that it stays in place.

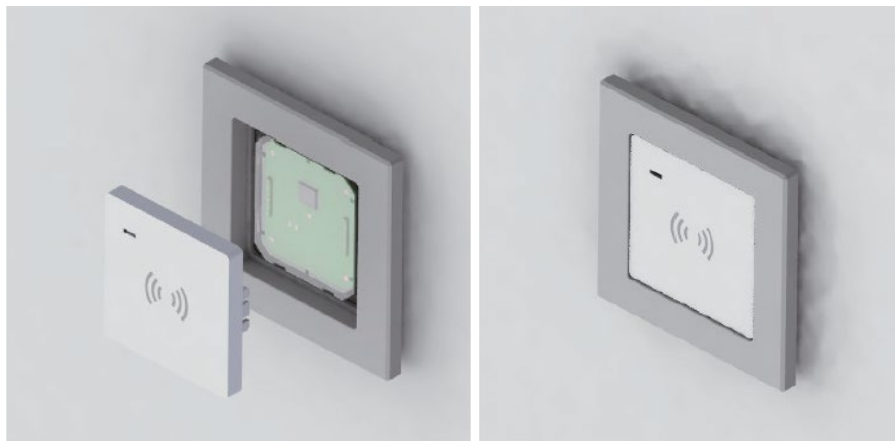


Fig. 11

5 MODE OF OPERATION

The mode of operation described in the following chapter is based on a standard ELATEC RFID reader equipped with two LEDs. Depending on your product (number of LEDs, installed firmware, etc.) and in case the product settings have been modified with the ELATEC AppBlaster tool, the information below might differ from your product configuration when in operation. In particular, the color and sequence of the LEDs on your product might be different.

5.1 OPERATING MODE

To start operating the reader, it simply has to be connected directly to a host device.

5.2 POWER UP

- In case of an external power supply unit is used, the following requirements must be satisfied:
 - ES1/PS2 classified power source according to IEC 62368-1
 - Short-circuit current < 8 A

Once the reader is connected to the host device, it detects the type of communication cable (e.g. USB), with which it is connected to the host. In case of RS-232, a version string is sent via RS-232 to the host device.

5.3 ENUMERATION

Only applicable for USB version of readers:

Once the reader has been powered up, it waits for completion of the enumeration by the USB host. As long as the reader is not enumerated, it is in a minimum power consumption mode, where both LEDs are turned off.

5.4 INITIALIZATION

After powering up and enumeration (USB mode), the reader turns on the built-in transponder reader logic. The green LED is turned on permanently. Some RFID readers need some kind of initialization, which is performed in this step. After successful initialization, the reader sounds a short sequence, which consists of a lower tone followed by a higher tone.

5.5 NORMAL OPERATION

As soon as the reader has completed the initialization, it enters the normal operation mode. During normal operation, the reader searches for a transponder continuously.

5.6 DETECTION OF A TRANSPONDER

If a transponder is detected by the reader, the following actions are performed:

- Send the ID to the host. By default, the USB devices send by emulating keystrokes of a keyboard. RS-232 devices send the ASCII code of an ID.
- Sound a beep.
- Turn off the green LED.
- Blink the red LED for two seconds.
- Turn on the green LED.

Within the two seconds timeout, where the red LED is blinking, the transponder, which just has been recognized will not be accepted again. This prevents the reader from sending identical IDs more than one time to the host. If during the two seconds timeout of the red LED a different transponder is detected, the complete sequence restarts immediately.

5.7 SUSPEND MODE

The USB version of readers support the USB suspend mode. If the USB host signals suspend via the USB bus, the reader turns off most of its power consuming peripherals. During this operation mode, no detection of transponders is possible and all LEDs are turned off. Once the host resumes to normal operation mode, this is also signaled via the USB bus. Therefore, the reader will resume to normal operation too.

6 COMPLIANCE STATEMENTS

6.1 GENERAL STATEMENTS

6.1.1 RF EXPOSURE STATEMENT

The RFID readers and modules of the TWN4 Palon Compact family comply with the RF exposure requirements for mobile and fixed devices (47 CFR 2.1091). However, the devices shall be used in such a manner that the potential for human contact during normal operation is minimized.

6.1.2 MEXICO / MÉXICO

La operación de este equipo está sujeta a las siguientes dos condiciones:

- (1) Es posible que este equipo o dispositivo no cause interferencia perjudicial y
- (2) Este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

6.2 TWN4 PALON COMPACT M

6.2.1 EU

Hereby, ELATEC GmbH declares that TWN4 Palon Compact M complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: elatec.com/approvals

6.2.2 FCC

FCC ID: WP5TWN4F10
Contains FCC ID: QOQ11

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation. (except receivers associated with operation of a licensed radio service and stand-alone devices).

Caution

The Federal Communications Commission (FCC) warns the users that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC §15.105 (b)

Note: 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

6.2.3 ISED / ISDE CANADA

IC: 7948A-TWN4F10

Contains IC: 5123A-11

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

6.2.4 UNITED KINGDOM

TWN4 Palon Compact M complies with the requirements of the UK legislations and other regulations as listed in the respective UK declaration of conformity. The importer is responsible for applying the following information to the packaging of the product:



- the importer company's details, including the company's name and a contact address in the United Kingdom.
- UKCA marking

6.3 TWN4 PALON COMPACT M LIGHT

6.3.1 EU

Hereby, ELATEC GmbH declares that TWN4 Palon Compact M Light complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: elatec.com/approvals

6.3.2 FCC

FCC ID: WP5TWN4F10

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. (except receivers associated with operation of a licensed radio service and stand-alone devices).

Caution

The Federal Communications Commission (FCC) warns the users that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC §15.105 (b)

Note: 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

6.3.3 ISED / ISDE CANADA

IC: 7948A-TWN4F10

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

6.3.4 ARGENTINA

 RAMATEL H-26976

6.3.5 BRAZIL / BRASIL

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

6.3.6 CHINA (PRC) / 中华人民共和国

<p>Micropower scope of use declaration:</p> <p>TWN4 Palon Compact M Light supports transmission frequencies of 13.56 MHz and 125 kHz. The user needs to adhere to the following specifications when using the product:</p> <p>(1) The specific provisions listed in the “catalog and the technical specifications for micropower short-range radio transmission equipment” as well as the usage scenarios for the antenna type used, the functions, and the customary use of the control system, regulation, and switches must be complied with;</p> <p>Transmission power: 13.56 MHz: $\leq -7.17 \text{ dB}\mu\text{A/m}$ (field strength at 10 meters, standard max value) 125 kHz: $\leq -13.95 \text{ dB}\mu\text{A/m}$ (field strength at 10 meters, standard max value)</p> <p>Antenna: built-in antenna (cannot be removed)</p> <p>Control system, regulation, and switches: The user cannot control, regulate, or switch over the radio transmission function of the antenna.</p> <p>(2) The unauthorized modification of usage scenarios or the conditions of use, expansion of the transmission frequency range, or increase of the transmission power (including installing additional transmission power amplifiers), as well as the unauthorized modification of the transmission antenna are not allowed;</p> <p>(3) The product may not interfere in any way with any legal radio transmitters (stations) and may not offer any shielding from harmful interference;</p> <p>(4) The product must be able to tolerate interference caused by industrial, scientific, and medical (ISM) devices which radiate high frequency energy or other legal interference from radio transmitters (stations);</p> <p>(5) Should the product cause harmful interference on other legal radio transmitters (stations), product use must be discontinued immediately and suitable measures must be taken prior to</p>	<p>微功率使用规范声明：</p> <p>TWN4 Palon Compact M Light 支持 13.56MHz 和 125kHz 发射频率，用户在使用过程中，需要遵守以下要求：</p> <p>(一) 符合“微功率短距离无线电发射设备目录和技术要求”的具体条款和使用场景，采用的天线类型和性能，控制、调整及开关等使用方法；</p> <p>发射功率：</p> <p>13.56MHz：$\leq -7.17\text{dB}\mu\text{A/m}$ (10 米处场强，准峰值)</p> <p>125kHz：$\leq -13.95\text{dB}\mu\text{A/m}$ (10 米处场强，准峰值)</p> <p>天线：内置天线（不可拆卸）</p> <p>控制、调整及开关：用户不能控制、调制及开关此无线电发射功能</p> <p>(二) 不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线；</p> <p>(三) 不得对其他合法的无线电台（站）产生有害干扰，也不得提出免受有害干扰保护；</p> <p>(四) 应当承受辐射射频能量的工业、科学及医疗（ISM）应用设备的干扰或其他合法的无线电台（站）干扰；</p> <p>(五) 如对其他合法的无线电台（站）产生有害干扰时，应立即停止使用，并采取措施消除干扰后方可继续使用；</p> <p>(六) 在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达站、卫星地球站（含测控、测距、接收、导航站）等军民用无线电台（站）、</p>
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<p>using the product again in order to eliminate said interference;</p> <p>(6) When using micropower devices inside of an aircraft or radiometric observatories, or when using such devices in meteorological radar stations, satellite ground stations (including measuring and control stations, distance measuring stations, receiving stations, or navigation stations), as well as in radio transmitters (stations) used by the military and electromagnetic environment protections zones at airports, all applicable provisions of the competent authorities as well as statutory provisions, national regulations, and national standards must be complied with;</p> <p>(7) Remote controls of any kind may not be used within 5000 meters of airport runways, measured from the middle of the runway;</p> <p>(8) Ambient conditions such as temperature and voltage when using micropower devices: operating voltage of TWN4 Palon Compact M Light: 4.3 V – 5.5 V (charging via micro USB), operating temperature: -25 °C – 80 °C, storage temperature: -40 °C – 85 °C.</p> <p>The user must strictly adhere to these temperature and voltage specifications when using the product.</p>	<p>机场等的电磁环境保护区域内使用微功率设备，应当遵守电磁环境保护及相关行业主管部门的规定；</p> <p>(七) 禁止在以机场跑道中心点为圆心、半径 5000 米的区域内使用各类模型遥控器；</p> <p>(八) 微功率设备使用时温度和电压的环境条件。</p> <p>TWN4 Palon Compact M Light 的工作电压 4.3V-5.5V (微型 USB 供电)。</p> <p>工作温度-25°C~80°C， 储存温度-40°C~85°C。</p> <p>用户需严格按照此温度和电压要求使用。</p>
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6.3.7 UNITED KINGDOM

TWN4 Palon Compact M Light complies with the requirements of the UK legislations and other regulations as listed in the respective UK declaration of conformity. The importer is responsible for applying the following information to the packaging of the product:



- the importer company's details, including the company's name and a contact address in the United Kingdom.
- UKCA marking

6.4 TWN4 PALON COMPACT LEGIC M

6.4.1 EU

Hereby, ELATEC GmbH declares that TWN4 Palon Compact LEGIC M complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: elatec.com/approvals

6.4.2 FCC

FCC ID: WP5TWN4F11

Contains FCC ID: QOQ11

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation. (except receivers associated with operation of a licensed radio service and stand-alone devices).

Caution

The Federal Communications Commission (FCC) warns the users that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC §15.105 (b)

Note: 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

6.4.3 ISED / ISDE CANADA

IC: 7948A-TWN4F11

Contains IC: 5123A-11

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

6.4.4 UNITED KINGDOM

TWN4 Palon Compact LEGIC M complies with the requirements of the UK legislations and other regulations as listed in the respective UK declaration of conformity. The importer is responsible for applying the following information to the packaging of the product:



- the importer company's details, including the company's name and a contact address in the United Kingdom.
- UKCA marking

6.5 TWN4 PALON COMPACT LEGIC M LIGHT

6.5.1 EU

Hereby, ELATEC GmbH declares that TWN4 Palon Compact LEGIC M Light complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: elatec.com/approvals

6.5.2 FCC

FCC ID: WP5TWN4F11

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation. (except receivers associated with operation of a licensed radio service and stand-alone devices).

Caution

The Federal Communications Commission (FCC) warns the users that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC §15.105 (b)

Note: 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

6.5.3 ISED / ISDE CANADA

IC: 7948A-TWN4F11

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L’émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d’Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes:

1. L’appareil ne doit pas produire de brouillage;
2. L’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.

6.5.4 CHINA (PRC) / 中华人民共和国

<p>Micropower scope of use declaration:</p> <p>TWN4 Palon Compact LEGIC M Light supports transmission frequencies of 13.56 MHz and 125 kHz. The user needs to adhere to the following specifications when using the product:</p> <p>(1) The specific provisions listed in the “catalog and the technical specifications for micropower short-range radio transmission equipment” as well as the usage scenarios for the antenna type used, the functions, and the customary use of the control system, regulation, and switches must be complied with;</p> <p>Transmission power: 13.56 MHz: $\leq -1.06 \text{ dB}\mu\text{A/m}$ (field strength at 10 meters, standard max value) 125 kHz: $\leq -13.77 \text{ dB}\mu\text{A/m}$ (field strength at 10 meters, standard max value)</p> <p>Antenna: built-in antenna (cannot be removed)</p> <p>Control system, regulation, and switches: The user cannot control, regulate, or switch over the radio transmission function of the antenna.</p> <p>(2) The unauthorized modification of usage scenarios or the conditions of use, expansion of the transmission frequency range, or increase of the transmission power (including installing additional transmission power amplifiers), as well</p>	<p>微功率使用规范声明：</p> <p>TWN4 Palon Compact LEGIC M Light 支持 13.56MHz 和 125kHz 发射频率，用户在使用过程中，需要遵守以下要求：</p> <p>(二) 符合“微功率短距离无线电发射设备目录和技术要求”的具体条款和使用场景，采用的天线类型和性能，控制、调整及开关等使用方法；</p> <p>发射功率：</p> <p>13.56MHz：$\leq -1.06\text{dB}\mu\text{A/m}$ (10 米处场强，准峰值) 125kHz：$\leq -13.77\text{dB}\mu\text{A/m}$ (10 米处场强，准峰值)</p> <p>天线：内置天线（不可拆卸）</p> <p>控制、调整及开关：用户不能控制、调制及开关此无线电发射功能</p> <p>(二) 不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线；</p>
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<p>as the unauthorized modification of the transmission antenna are not allowed;</p> <p>(3) The product may not interfere in any way with any legal radio transmitters (stations) and may not offer any shielding from harmful interference;</p> <p>(4) The product must be able to tolerate interference caused by industrial, scientific, and medical (ISM) devices which radiate high frequency energy or other legal interference from radio transmitters (stations);</p> <p>(5) Should the product cause harmful interference on other legal radio transmitters (stations), product use must be discontinued immediately and suitable measures must be taken prior to using the product again in order to eliminate said interference;</p> <p>(6) When using micropower devices inside of an aircraft or radiometric observatories, or when using such devices in meteorological radar stations, satellite ground stations (including measuring and control stations, distance measuring stations, receiving stations, or navigation stations), as well as in radio transmitters (stations) used by the military and electromagnetic environment protections zones at airports, all applicable provisions of the competent authorities as well as statutory provisions, national regulations, and national standards must be complied with;</p> <p>(7) Remote controls of any kind may not be used within 5000 meters of airport runways, measured from the middle of the runway;</p> <p>(8) Ambient conditions such as temperature and voltage when using micropower devices: operating voltage of TWN4 Palon Compact LEGIC M Light: 4.3 V – 5.5 V (charging via micro USB), operating temperature: -25 °C – 80 °C, storage temperature: -40 °C – 85 °C.</p> <p>The user must strictly adhere to these temperature and voltage specifications when using the product.</p>	<p>(三) 不得对其他合法的无线电台(站)产生有害干扰,也不得提出免受有害干扰保护;</p> <p>(四) 应当承受辐射射频能量的工业、科学及医疗(ISM)应用设备的干扰或其他合法的无线电台(站)干扰;</p> <p>(五) 如对其他合法的无线电台(站)产生有害干扰时,应立即停止使用,并采取措施消除干扰后方可继续使用;</p> <p>(六) 在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达站、卫星地球站(含测控、测距、接收、导航站)等军民用无线电台(站)、机场等的电磁环境保护区域内使用微功率设备,应当遵守电磁环境保护及相关行业主管部门的规定;</p> <p>(七) 禁止在以机场跑道中心点为圆心、半径 5000 米的区域内使用各类模型遥控器;</p> <p>(八) 微功率设备使用时温度和电压的环境条件。 TWN4 Palon Compact LEGIC M Light 的工作电压 4.3V-5.5V (微型 USB 供电), 工作温度-25°C~80°C, 储存温度-40°C~85°C。</p> <p>用户需严格按照此温度和电压要求使用。</p>
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6.5.5 UNITED KINGDOM

TWN4 Palon Compact LEGIC M Light complies with the requirements of the UK legislations and other regulations as listed in the respective UK declaration of conformity. The importer is responsible for applying the following information to the packaging of the product:



- the importer company's details, including the company's name and a contact address in the United Kingdom.
- UKCA marking

6.6 TWN4 PALON COMPACT PANEL

Refer to Chapter "TWN4 Palon Compact M".

6.7 TWN4 PALON COMPACT PANEL LIGHT

Refer to Chapter "TWN4 Palon Compact M Light".

6.8 TWN4 PALON COMPACT LEGIC PANEL

Refer to Chapter "TWN4 Palon Compact LEGIC M".

6.9 TWN4 PALON COMPACT LEGIC PANEL LIGHT

Refer to Chapter "TWN4 Palon Compact LEGIC M Light".

6.10 TWN4 PALON COMPACT WALL

6.10.1 EU

Hereby, ELATEC GmbH declares that TWN4 Palon Compact Wall complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: elatec.com/approvals

6.10.2 FCC

Contains FCC ID: WP5TWN4F10

Contains FCC ID: QOQ11

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation. (except receivers associated with operation of a licensed radio service and stand-alone devices).

Caution

The Federal Communications Commission (FCC) warns the users that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC §15.105 (b)

Note: 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

6.10.3 ISED / ISDE CANADA

Contains IC: 7948A-TWN4F10

Contains IC: 5123A-11

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

6.10.4 UNITED KINGDOM

TWN4 Palon Compact Wall complies with the requirements of the UK legislations and other regulations as listed in the respective UK declaration of conformity. The importer is responsible for applying the following information to the packaging of the product:



- the importer company's details, including the company's name and a contact address in the United Kingdom.
- UKCA marking

6.11 TWN4 PALON COMPACT WALL LIGHT**6.11.1 EU**

Hereby, ELATEC GmbH declares that TWN4 Palon Compact Wall Light complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: elatec.com/approvals

6.11.2 FCC

Contains FCC ID: WP5TWN4F10

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation. (except receivers associated with operation of a licensed radio service and stand-alone devices).

Caution

The Federal Communications Commission (FCC) warns the users that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC §15.105 (b)

Note: 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

6.11.3 ISED / ISDE CANADA

Contains IC: 7948A-TWN4F10

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

6.11.4 CHINA (PRC) / 中华人民共和国

<p>Micropower scope of use declaration:</p> <p>TWN4 Palon Compact Wall Light supports transmission frequencies of 13.56 MHz and 125 kHz. The user needs to adhere to the following specifications when using the product:</p> <p>(1) The specific provisions listed in the “catalog and the technical specifications for micropower short-range radio transmission equipment” as well as the usage scenarios for the antenna type used, the functions, and the customary use of the control system, regulation, and switches must be complied with;</p> <p>Transmission power: 13.56 MHz: $\leq -7.46 \text{ dB}\mu\text{A/m}$ (field strength at 10 meters, standard max value) 125 kHz: $\leq -10.91 \text{ dB}\mu\text{A/m}$ (field strength at 10 meters, standard max value)</p> <p>Antenna: built-in antenna (cannot be removed)</p> <p>Control system, regulation, and switches: The user cannot control, regulate, or switch over the radio transmission function of the antenna.</p> <p>(2) The unauthorized modification of usage scenarios or the conditions of use, expansion of the transmission frequency range, or increase of the transmission power (including installing additional transmission power amplifiers), as well as the unauthorized modification of the transmission antenna are not allowed;</p> <p>(3) The product may not interfere in any way with any legal radio transmitters (stations) and may not offer any shielding from harmful interference;</p> <p>(4) The product must be able to tolerate interference caused by industrial, scientific, and medical (ISM) devices which radiate high frequency energy or other legal interference from radio transmitters (stations);</p> <p>(5) Should the product cause harmful interference on other legal radio transmitters (stations), product use must be discontinued immediately and suitable measures must be taken prior to</p>	<p>微功率使用规范声明：</p> <p>TWN4 Palon Compact Wall Light 支持 13.56MHz 和 125kHz 发射频率，用户在使用过程中，需要遵守以下要求：</p> <p>(三) 符合“微功率短距离无线电发射设备目录和技术要求”的具体条款和使用场景，采用的天线类型和性能，控制、调整及开关等使用方法；</p> <p>发射功率：</p> <p>13.56MHz：$\leq -7.46\text{dB}\mu\text{A/m}$ (10 米处场强，准峰值)</p> <p>125kHz：$\leq -10.91\text{dB}\mu\text{A/m}$ (10 米处场强，准峰值)</p> <p>天线：内置天线（不可拆卸）</p> <p>控制、调整及开关：用户不能控制、调制及开关此无线电发射功能</p> <p>(二) 不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线；</p> <p>(三) 不得对其他合法的无线电台（站）产生有害干扰，也不得提出免受有害干扰保护；</p> <p>(四) 应当承受辐射射频能量的工业、科学及医疗（ISM）应用设备的干扰或其他合法的无线电台（站）干扰；</p> <p>(五) 如对其他合法的无线电台（站）产生有害干扰时，应立即停止使用，并采取措施消除干扰后方可继续使用；</p> <p>(六) 在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达站、卫星地球站（含测控、测距、接收、导航站）等军民用无线电台（站）、</p>
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<p>using the product again in order to eliminate said interference;</p> <p>(6) When using micropower devices inside of an aircraft or radiometric observatories, or when using such devices in meteorological radar stations, satellite ground stations (including measuring and control stations, distance measuring stations, receiving stations, or navigation stations), as well as in radio transmitters (stations) used by the military and electromagnetic environment protections zones at airports, all applicable provisions of the competent authorities as well as statutory provisions, national regulations, and national standards must be complied with;</p> <p>(7) Remote controls of any kind may not be used within 5000 meters of airport runways, measured from the middle of the runway;</p> <p>(8) Ambient conditions such as temperature and voltage when using micropower devices: operating voltage of TWN4 Palon Compact Wall Light: 4.3 V – 5.5 V (charging via micro USB), operating temperature: -25 °C – 70 °C, storage temperature: -40 °C – 85 °C.</p> <p>The user must strictly adhere to these temperature and voltage specifications when using the product.</p>	<p>机场等的电磁环境保护区域内使用微功率设备，应当遵守电磁环境保护及相关行业主管部门的规定；</p> <p>(七) 禁止在以机场跑道中心点为圆心、半径 5000 米的区域内使用各类模型遥控器；</p> <p>(八) 微功率设备使用时温度和电压的环境条件。</p> <p>TWN4 Palon Compact Wall Light 的工作电压 4.3V-5.5V (微型 USB 供电)。</p> <p>工作温度-25°C~70°C， 储存温度-40°C~85°C。</p> <p>用户需严格按照此温度和电压要求使用。</p>
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6.11.5 UNITED KINGDOM

TWN4 Palon Compact Wall Light complies with the requirements of the UK legislations and other regulations as listed in the respective UK declaration of conformity. The importer is responsible for applying the following information to the packaging of the product:



- the importer company's details, including the company's name and a contact address in the United Kingdom.
- UKCA marking

6.12 TWN4 PALON COMPACT LEGIC WALL

6.12.1 EU

Hereby, ELATEC GmbH declares that TWN4 Palon Compact LEGIC Wall complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: elatec.com/approvals

6.12.2 FCC

Contains FCC ID: WP5TWN4F11

Contains FCC ID: QOQ11

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation. (except receivers associated with operation of a licensed radio service and stand-alone devices).

Caution

The Federal Communications Commission (FCC) warns the users that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC §15.105 (b)

Note: 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

6.12.3 ISED / ISDE CANADA

Contains IC: 7948A-TWN4F11

Contains IC: 5123A-11

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

6.12.4 UNITED KINGDOM

TWN4 Palon Compact LEGIC Wall complies with the requirements of the UK legislations and other regulations as listed in the respective UK declaration of conformity. The importer is responsible for applying the following information to the packaging of the product:



- the importer company's details, including the company's name and a contact address in the United Kingdom.
- UKCA marking

6.13 TWN4 PALON COMPACT LEGIC WALL LIGHT

6.13.1 EU

Hereby, ELATEC GmbH declares that TWN4 Palon Compact LEGIC Wall Light complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: elatec.com/approvals

6.13.2 FCC

Contains FCC ID: WP5TWN4F11

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. (except receivers associated with operation of a licensed radio service and stand-alone devices).

Caution

The Federal Communications Commission (FCC) warns the users that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC §15.105 (b)

Note: 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

6.13.3 ISED / ISDE CANADA

Contains IC: 7948A-TWN4F11

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L’émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d’Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes:

1. L’appareil ne doit pas produire de brouillage;
2. L’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.

6.13.4 CHINA (PRC) / 中华人民共和国

<p>Micropower scope of use declaration:</p> <p>TWN4 Palon Compact LEGIC Wall Light supports transmission frequencies of 13.56 MHz and 125 kHz. The user needs to adhere to the following specifications when using the product:</p> <p>(1) The specific provisions listed in the “catalog and the technical specifications for micropower short-range radio transmission equipment” as well as the usage scenarios for the antenna type used, the functions, and the customary use of the control system, regulation, and switches must be complied with;</p> <p>Transmission power: 13.56 MHz: ≤ 2.53 dBμA/m (field strength at 10 meters, standard max value) 125 kHz: ≤ -12.35 dBμA/m (field strength at 10 meters, standard max value)</p> <p>Antenna: built-in antenna (cannot be removed)</p> <p>Control system, regulation, and switches: The user cannot control, regulate, or switch over the radio transmission function of the antenna.</p> <p>(2) The unauthorized modification of usage scenarios or the conditions of use, expansion of the transmission frequency range, or increase of the transmission power (including installing additional transmission power amplifiers), as well</p>	<p>微功率使用规范声明：</p> <p>TWN4 Palon Compact LEGIC Wall Light 支持 13.56MHz 和 125kHz 发射频率，用户在使用过程中，需要遵守以下要求：</p> <p>(四) 符合“微功率短距离无线电发射设备目录和技术要求”的具体条款和使用场景，采用的天线类型和性能，控制、调整及开关等使用方法；</p> <p>发射功率：</p> <p>13.56MHz：≤ 2.53dBμA/m (10 米处场强，准峰值) 125kHz：≤ -12.35dBμA/m (10 米处场强，准峰值)</p> <p>天线：内置天线（不可拆卸）</p> <p>控制、调整及开关：用户不能控制、调制及开关此无线电发射功能</p> <p>(二) 不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线；</p>
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<p>as the unauthorized modification of the transmission antenna are not allowed;</p> <p>(3) The product may not interfere in any way with any legal radio transmitters (stations) and may not offer any shielding from harmful interference;</p> <p>(4) The product must be able to tolerate interference caused by industrial, scientific, and medical (ISM) devices which radiate high frequency energy or other legal interference from radio transmitters (stations);</p> <p>(5) Should the product cause harmful interference on other legal radio transmitters (stations), product use must be discontinued immediately and suitable measures must be taken prior to using the product again in order to eliminate said interference;</p> <p>(6) When using micropower devices inside of an aircraft or radiometric observatories, or when using such devices in meteorological radar stations, satellite ground stations (including measuring and control stations, distance measuring stations, receiving stations, or navigation stations), as well as in radio transmitters (stations) used by the military and electromagnetic environment protections zones at airports, all applicable provisions of the competent authorities as well as statutory provisions, national regulations, and national standards must be complied with;</p> <p>(7) Remote controls of any kind may not be used within 5000 meters of airport runways, measured from the middle of the runway;</p> <p>(8) Ambient conditions such as temperature and voltage when using micropower devices: operating voltage of TWN4 Palon Compact LEGIC Wall Light: 4.3 V – 5.5 V (charging via micro USB), operating temperature: -25 °C – 70 °C, storage temperature: -40 °C – 85 °C.</p> <p>The user must strictly adhere to these temperature and voltage specifications when using the product.</p>	<p>(三) 不得对其他合法的无线电台(站)产生有害干扰, 也不得提出免受有害干扰保护;</p> <p>(四) 应当承受辐射射频能量的工业、科学及医疗(ISM)应用设备的干扰或其他合法的无线电台(站)干扰;</p> <p>(五) 如对其他合法的无线电台(站)产生有害干扰时, 应立即停止使用, 并采取措施消除干扰后方可继续使用;</p> <p>(六) 在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达站、卫星地球站(含测控、测距、接收、导航站)等军民用无线电台(站)、机场等的电磁环境保护区域内使用微功率设备, 应当遵守电磁环境保护及相关行业主管部门的规定;</p> <p>(七) 禁止在以机场跑道中心点为圆心、半径 5000 米的区域内使用各类模型遥控器;</p> <p>(八) 微功率设备使用时温度和电压的环境条件。 TWN4 Palon Compact LEGIC Wall Light 的工作电压 4.3V-5.5V (微型 USB 供电), 工作温度-25°C~70°C, 储存温度-40°C~85°C。</p> <p>用户需严格按照此温度和电压要求使用。</p>
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6.13.5 UNITED KINGDOM

TWN4 Palon Compact LEGIC Wall Light complies with the requirements of the UK legislations and other regulations as listed in the respective UK declaration of conformity. The importer is responsible for applying the following information to the packaging of the product:



- the importer company's details, including the company's name and a contact address in the United Kingdom.
- UKCA marking

APPENDIX

A – RELEVANT DOCUMENTATION

ELATEC documentation

- ELATEC quick start guide
- TWN4 Palon technical handbook
- TWN4 Palon Compact M data sheet
- TWN4 Palon Compact M integration manual
- TWN4 Palon Compact M Light data sheet
- TWN4 Palon Compact M Light integration manual
- TWN4 Palon Compact LEGIC M data sheet
- TWN4 Palon Compact LEGIC M integration manual
- TWN4 Palon Compact LEGIC M Light data sheet
- TWN4 Palon Compact LEGIC M Light integration manual
- TWN4 Palon Compact Panel data sheet
- TWN4 Palon Compact Panel Light data sheet
- TWN4 Palon Compact LEGIC Panel data sheet
- TWN4 Palon Compact LEGIC Panel Light data sheet
- TWN4 Palon Compact Wall data sheet
- TWN4 Palon Compact Wall Light data sheet
- TWN4 Palon Compact LEGIC Wall data sheet
- TWN4 Palon Compact LEGIC Wall Light data sheet

External documentation

- Technical documentation related to the installation site or connected devices

B – TERMS AND ABBREVIATIONS

TERM	EXPLANATION
BLE	Bluetooth Low Energy
EMC	electromagnetic compatibility
HF	high frequency
LF	low frequency
MTBF	mean time between failures
NBR	nitrile butadiene rubber
RFID	radio frequency identification
R/W	read/write (distance)

C – REVISION HISTORY

VERSION	CHANGE DESCRIPTION	EDITION
01	First edition	05/2024



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