

# TWN4 MultiTech 2 LF

## Single-frequency LF RFID reader



TWN4 MultiTech 2 LF  
(exemplary illustration)

The TWN4 MultiTech 2 family of contactless RFID readers and modules allows users to read and write to almost any LF and HF tags and labels. All products support NFC and, optionally, Bluetooth Low Energy (BLE). In addition, they are also compatible with the two most commonly used smartphone operating systems, Android and iOS, which gives the option to integrate them in mobile identification applications. The desktop readers are available as Plug & Play devices that can be easily customized (i.e. inlay design), whereas the PCB modules offer a large amount of interfaces and a perfect form factor for an easy and quick integration in any host device. This broad range of product features makes the TWN4 MultiTech 2 family an excellent solution for almost every project.

TWN4 MultiTech 2 LF is a single-frequency product model of the TWN4 MultiTech 2 family that allows users to read and write almost all common worldwide 125 kHz tags and/or labels. Further key features of the reader include a powerful SDK for writing apps that are executed directly on the module, the possibility to upgrade the firmware in the field and transparent data exchange with the RFID media.

### Special features:

- + Possibility to read many LF RFID technologies
- + Cost-optimized single-frequency RFID solution (125 kHz) with integrated LF antenna
- + Powerful SDK for writing apps which are executed directly on the reader
- + Firmware update in the field possible
- + On-board 18 kB flash storage, e.g. for storing user accessible non-volatile data
- + Supports transparent data exchange with RFID media
- + CCID and PC/SC 2.01
- + Customizable inlay design



Elevator



EV Chargers



Access



Shop POS



Fitness  
Equipment



Ticket POS



PC Log-on



Document  
Management



Driver ID



Vending



Parking



Gaming



Locker Locks



Time  
Attendance



Industrial  
PC

## TECHNICAL DATA

FREQUENCY	125 kHz (LF)																
ANTENNA	Integrated																
HOUSING	Material: ABS UL94-V0 Color: black or white																
DIMENSIONS (L X W X H)	Approx. 88.00 x 56.00 x 18.50 mm / 3.46 x 2.20 x 0.73 inch																
POWER	USB: 4.3 V - 5.5 V RS-232: requires 5 V external power supply ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A																
CURRENT CONSUMPTION	RF field on: 90 mA typically																
TEMPERATURE RANGE	Operating: -25 °C up to +70 °C (-13 °F up to +158 °F) Storage: -40 °C up to +75 °C (-40 °F up to +167 °F)																
RELATIVE HUMIDITY	5% to 95% non-condensing																
READ/WRITE DISTANCE	Up to 100 mm / 4 inch, depending on environment and transponder																
OPERATING MODES (USB)	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01																
MTBF	500,000 hours																
WEIGHT	Approx. 115 g / 4.06 oz (with cable)																
SUPPORTED OPTIONS AND TRANSPONDERS	Depending on the firmware version and installed options, ELATEC readers and modules can support a wide range of RFID technologies. Please refer to the relevant ELATEC transponder matrix (available at <a href="http://www.elatec-rfid.com/int/transponder-technology">www.elatec-rfid.com/int/transponder-technology</a> ) for more information about the available options and RFID technologies supported by the product.																
OS SUPPORT	Windows 7 (32-/64-bit) and higher versions, Linux, Android <sup>1)</sup> , iOS <sup>1)</sup> , MAC OS X <sup>1)</sup>																
PERIPHERAL INTERFACES	USB, RS-232, 1 SAM slot for ID-000 card format																
TRANSMISSION SPEED	Host: USB full speed (12 Mbit/s), RS-232: up to 115,200 baud																
CERTIFICATION NAME	TWN4 MultiTech 2 LF																
CERTIFICATIONS	Non-exhaustive list <sup>2)</sup> : CE/RED, FCC, IC, TAA compliant, REACH and RoHS-III compliant																
ORDER CODES	<table border="0"> <tr> <td>T4BT-FB2BEL4</td> <td>Standard reader, USB cable, black housing</td> </tr> <tr> <td>T4BT-FB2WEL4</td> <td>Standard reader, USB cable, white housing</td> </tr> <tr> <td>T4BT-FR2BEL4</td> <td>Standard reader, RS-232 cable, black housing</td> </tr> <tr> <td>T4BT-FR2WEL4</td> <td>Standard reader, RS-232 cable, white housing</td> </tr> <tr> <td>T4BT-FB2BEL4-P</td> <td>Reader with P option, USB cable, black housing</td> </tr> <tr> <td>T4BT-FB2WEL4-P</td> <td>Reader with P option, USB cable, white housing</td> </tr> <tr> <td>T4BT-FR2BEL4-P</td> <td>Reader with P option, RS-232 cable, black housing</td> </tr> <tr> <td>T4BT-FR2WEL4-P</td> <td>Reader with P option, RS-232 cable, white housing</td> </tr> </table> <p>The order codes above describe RFID readers equipped with a two-meter-long cable. Contact ELATEC for other cable lengths.</p>	T4BT-FB2BEL4	Standard reader, USB cable, black housing	T4BT-FB2WEL4	Standard reader, USB cable, white housing	T4BT-FR2BEL4	Standard reader, RS-232 cable, black housing	T4BT-FR2WEL4	Standard reader, RS-232 cable, white housing	T4BT-FB2BEL4-P	Reader with P option, USB cable, black housing	T4BT-FB2WEL4-P	Reader with P option, USB cable, white housing	T4BT-FR2BEL4-P	Reader with P option, RS-232 cable, black housing	T4BT-FR2WEL4-P	Reader with P option, RS-232 cable, white housing
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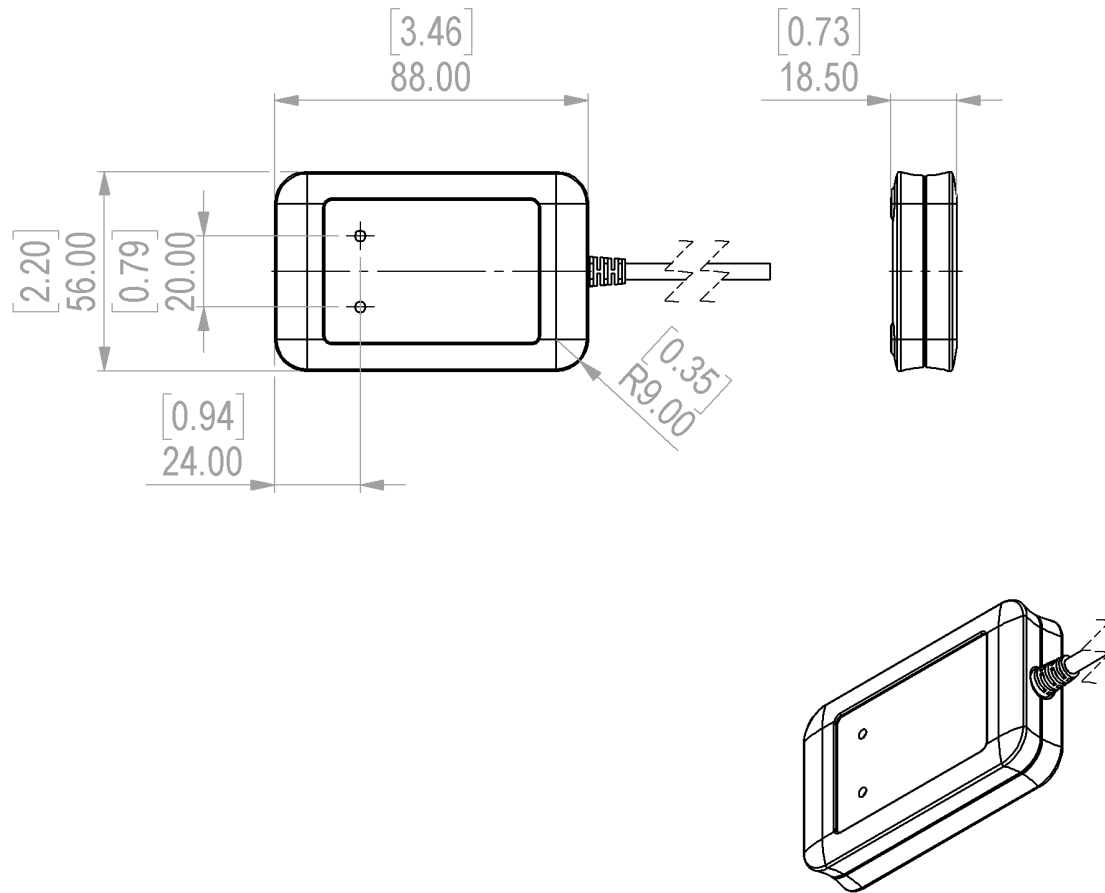
<sup>1)</sup>On request

<sup>2)</sup>The product has been certified for use in many countries and regions. Contact your Sales representative for detailed information about all certifications and approvals granted to the product.

## ACCESSORIES

HOLDERS	HKSI-B	Snap-in holder, black
	HKSI-W	Snap-in holder, white
	HKBR-B	Bracket holder, black
	HKBR-W	Bracket holder, white
POWER SUPPLIES	ELATEC RFID readers and modules can be delivered with additional cables or external power supplies. Refer to the data sheet <i>Cables for ELATEC devices</i> for detailed information.	

## TECHNICAL DRAWINGS



All measures in mm [inch]

### ELATEC GmbH

Zeppelinstr. 1  
82178 Puchheim  
Germany  
P +49 89 552 9961 0  
F +49 89 552 9961 129  
E-Mail: info-rfid@elatec.com  
Website: elatec.com

### ELATEC Systems GmbH

Schwieberdinger Str. 44  
71636 Ludwigsburg  
Germany  
P +49 7141 309736 0  
E-Mail: info-rfid@elatec.com  
Website: elatec.com

### ELATEC Inc.

1995 SW Martin Hwy  
Palm City • FL 34990  
USA  
P +1 772 210 2263  
F +1 772 382 3749  
E-Mail: americas-info@elatec.com  
Website: elatec.com

### ELATEC Technology (Shenzhen) LLC

918, Main Building, Tian An Cyber Times  
Tower, No. 6, Tairan Fourth Road, Tian 'an  
Community, Shatou Neighborhood  
Futian District • Shenzhen • China  
P/F +86 755 2394 6014  
E-Mail: apac-info@elatec.com  
Website: elatec.com

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