

# TWN4 MultiTech 2 LEGIC LF HF

(SM-4200/4500 frontend)

## Multi-frequency RFID reader (LF/HF) with NFC support



TWN4 MultiTech 2 LEGIC LF HF  
(exemplary illustration)

The contactless RFID readers and modules of the ELATEC TWN4 MultiTech 2 LEGIC family are a direct enhancement of the TWN4 MultiTech LEGIC readers with the same form factors (PCB modules and desktop readers with housing). During the development of the TWN4 MultiTech 2 LEGIC family, special emphasis has been placed on optimizing the HF performance (13.56 MHz). Compared to the predecessor TWN4 MultiTech LEGIC, the read range could be increased by more than 50% for LEGIC transponders and even doubled for some HF transponders.

TWN4 MultiTech 2 LEGIC LF HF key features include a powerful SDK for writing apps that are executed directly on the reader, the possibility to upgrade the firmware in the field, and transparent data exchange with the RFID media. Additionally, the reader can read more than 60 RFID technologies from low (LF) and high frequency (HF) bands, including NFC. This gives the option to select as many of the technologies required instead of being forced to select just a few ones.

### Special features:

- + Possibility to read more than 60 RFID technologies
- + Two RFID frequencies (125 kHz/13.56 MHz) and NFC support
- + Optimized HF read performance
- + 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
- + Support of segment initialization function (LEGIC SM-4500 frontend only)



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

FREQUENCIES	125 kHz (LF) / 13.56 MHz (HF)
ANTENNAS	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 PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
CURRENT CONSUMPTION	RF field on: 140 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	LF and HF: 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. 120 g / 4.23 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, 2 SAM slots for ID-000 card format
TRANSMISSION SPEED	Host: USB full speed (12 Mbit/s), RS-232: up to 115,200 baud, HF Air: up to 848 kbit/s
CERTIFICATION NAME	TWN4 MultiTech 2 LEGIC LF HF
CERTIFICATIONS	Non-exhaustive list <sup>2)</sup> : CE/RED, FCC, IC, UL listed, REACH and RoHS-III compliant

<sup>1)</sup>On request

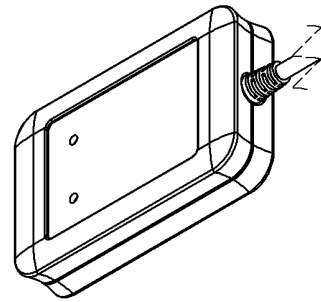
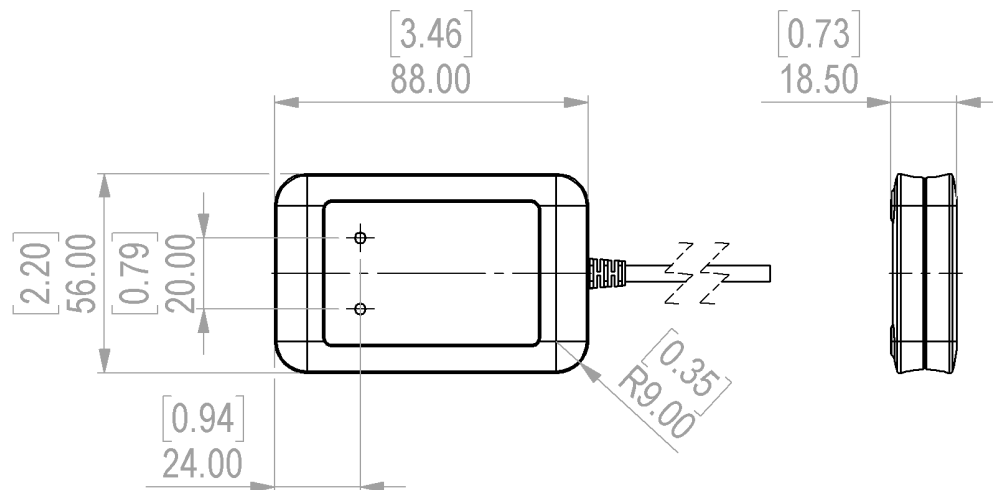
<sup>2)</sup>The product has been certified for use in many countries and regions. Contact your Sales representative for detailed information about all certifications and approvals granted to the product.

ORDER CODES	<b>Readers with LEGIC SM-4200</b>		
	T4BT-BB2BEL6	Standard reader, USB cable, black housing	
	T4BT-BB2WEL6	Standard reader, USB cable, white housing	
	T4BT-BR2BEL6	Standard reader, RS-232 cable, black housing	
	T4BT-BR2WEL6	Standard reader, RS-232 cable, white housing	
	T4BT-BB2BEL6-P	Reader with P option, USB cable, black housing	
	T4BT-BB2WEL6-P	Reader with P option, USB cable, white housing	
	T4BT-BR2BEL6-P	Reader with P option, RS-232 cable, black housing	
	T4BT-BR2WEL6-P	Reader with P option, RS-232 cable, white housing	
	T4BT-BB2BEL6-PI	Reader with PI options, USB cable, black housing	
	T4BT-BB2WEL6-PI	Reader with PI options, USB cable, white housing	
	T4BT-BR2BEL6-PI	Reader with PI options, RS-232 cable, black housing	
	T4BT-BR2WEL6-PI	Reader with PI options, RS-232 cable, white housing	
	<b>Readers with LEGIC SM-4500</b>		
	T4BT-BB2BEL6-5	Standard reader, USB cable, black housing	
	T4BT-BB2WEL6-5	Standard reader, USB cable, white housing	
	T4BT-BR2BEL6-5	Standard reader, RS-232 cable, black housing	
	T4BT-BR2WEL6-5	Standard reader, RS-232 cable, white housing	
	T4BT-BB2BEL6-5P	Reader with P option, USB cable, black housing	
	T4BT-BB2WEL6-5P	Reader with P option, USB cable, white housing	
	T4BT-BR2BEL6-5P	Reader with P option, RS-232 cable, black housing	
	T4BT-BR2WEL6-5P	Reader with P option, RS-232 cable, white housing	
	T4BT-BB2BEL6-5PI	Reader with PI options, USB cable, black housing	
	T4BT-BB2WEL6-5PI	Reader with PI options, USB cable, white housing	
	T4BT-BR2BEL6-5PI	Reader with PI options, RS-232 cable, black housing	
	T4BT-BR2WEL6-5PI	Reader with PI options, RS-232 cable, white housing	
	The order codes above describe RFID readers equipped with a two-meter-long cable. Contact ELATEC for other cable lengths.		

## 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](mailto:info-rfid@elatec.com)  
Website: [elatec.com](http://elatec.com)

### ELATEC Systems GmbH

Schwieberdinger Str. 44  
71636 Ludwigsburg  
Germany  
P +49 7141 309736 0  
E-Mail: [info-rfid@elatec.com](mailto:info-rfid@elatec.com)  
Website: [elatec.com](http://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](mailto:americas-info@elatec.com)  
Website: [elatec.com](http://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](mailto:apac-info@elatec.com)  
Website: [elatec.com](http://elatec.com)

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