

# TWN4 MultiTech LEGIC

TWN4 LEGIC NFC (SM-4200/4500 frontend)

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



TWN4 MultiTech  
(exemplary illustration)

ELATEC TWN4 family of RFID readers and modules allows users to read and write to almost any 125 kHz and 13.56 MHz tags and/or labels. It supports all major transponders from various suppliers like ATMEL, EM, ST, NXP, TI, HID, LEGIC, etc. and ISO standards like ISO 14443A/B (T=CL), ISO 15693 and ISO 18092 / ECMA-340 (NFC). The new generation is a direct enhancement to the successful TWN3 family as it comes in the same mechanical dimensions (OEM PCB and desktop housing). The readers support host communication via USB or RS-232.

Special features:

- + Possibility to read more than 60 RFID technologies
- + 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
- + Dedicated expansion bus for connection of LCD, mass storage, etc.
- + Supports initialization of segments (LEGIC SM-4500 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<br>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<br>ES1/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)<br>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  | USB full speed (12 Mbit/s), RS-232: up to 115,200 baud, HF Air: up to 848 kbit/s  |   |
| CERTIFICATION NAME  | TWN4 LEGIC NFC  |   |
| CERTIFICATIONS  | Non-exhaustive list <sup>2)</sup> :<br>CE/RED, FCC, IC, TAA compliant, REACH and RoHS-III compliant   |   |
| ORDER CODES   | <b>Readers with LEGIC SM-4200</b>   |   |
|   | T4DT-BB2BEL   | Standard reader, USB cable, black housing         |
|   | T4DT-BB2WEL   | Standard reader, USB cable, white housing         |
|   | T4DT-BR2BEL   | Standard reader, RS-232 cable, black housing      |
|   | T4DT-BR2WEL   | Standard reader, RS-232 cable, white housing      |
|   | T4DT-BB2BEL-P   | Reader with P option, USB cable, black housing    |
|   | T4DT-BB2WEL-P   | Reader with P option, USB cable, white housing    |
|   | T4DT-BR2BEL-P   | Reader with P option, RS-232 cable, black housing |
|   | T4DT-BR2WEL-P   | Reader with P option, RS-232 cable, white housing |
|   | <b>Readers with LEGIC SM-4500</b>   |   |
|   | T4DT-BB2BEL-5   | Standard reader, USB cable, black housing         |
|   | T4DT-BB2WEL-5   | Standard reader, USB cable, white housing         |
|   | T4DT-BR2BEL-5   | Standard reader, RS-232 cable, black housing      |
|   | T4DT-BR2WEL-5   | Standard reader, RS-232 cable, white housing      |
|   | T4DT-BB2BEL-5P  | Reader with P option, USB cable, black housing    |
| T4DT-BB2WEL-5P  | Reader with P option, USB cable, white housing  |   |
| T4DT-BR2BEL-5P  | Reader with P option, RS-232 cable, black housing   |   |
| T4DT-BR2WEL-5P  | Reader with P option, 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. |   |   |

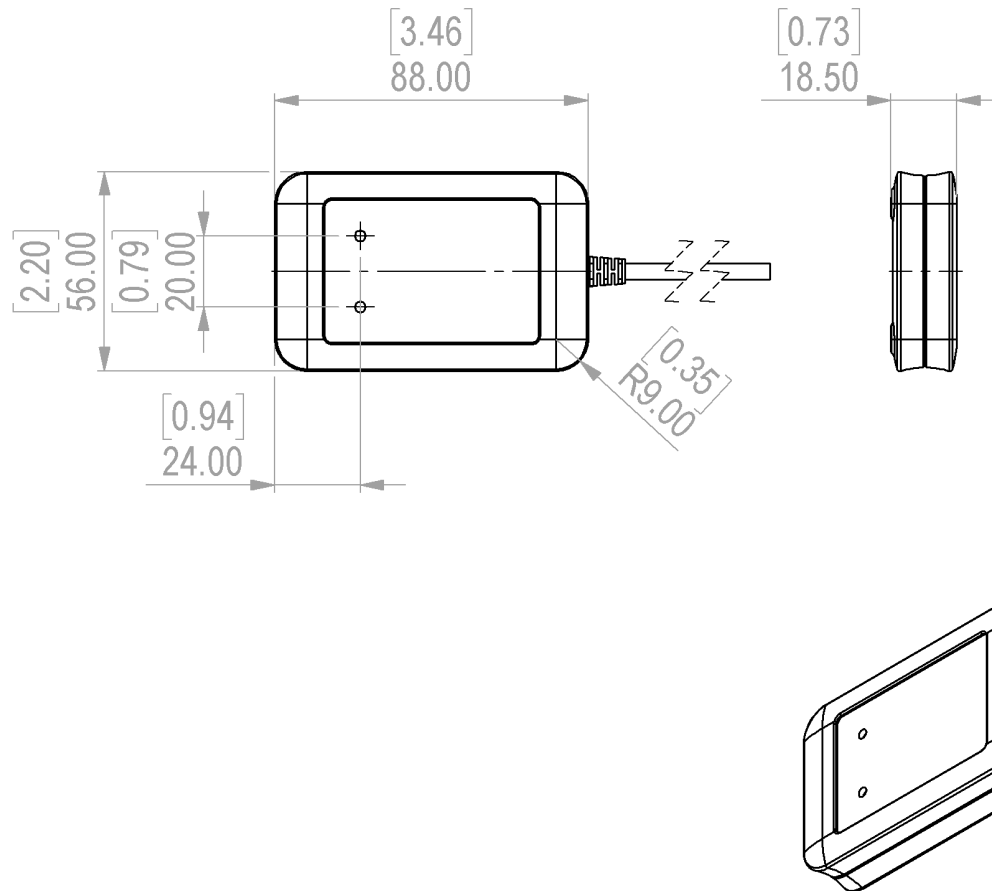
<sup>1)</sup>On request

<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]

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