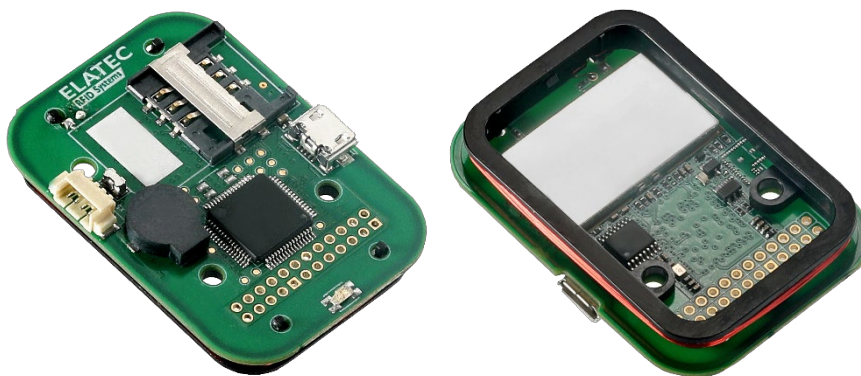


# TWN4 MultiTech 3 LEGIC M LF HF

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



TWN4 MultiTech 3 LEGIC M LF HF  
(exemplary illustrations\*)

\*Product images may show product variants or additional components that are not available.

The powerful reader modules of the ELATEC TWN4 MultiTech 3 family combine a compact form factor with optimized read/write performance. All devices integrate RFID (125 kHz and 13.56 MHz), NFC and, optionally, Bluetooth Low Energy (BLE) capabilities. Thanks to their reduced size, the modules can be easily used for almost all applications where small size and full performance matter. Furthermore, they are compatible with the most common host interfaces, such as USB, and they can also be configured with different connector options.

TWN4 MultiTech 3 LEGIC M LF HF key features 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. Additionally, the module 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
- + Optionally available with a 24-pin header, further configurations available
- + Powerful SDK for writing apps which are executed directly on the module
- + 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
- + Optimized read/write performance combined with a compact form factor



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
DIMENSIONS (L X W X H)	C0 hardware configuration: Approx. 50.00 x 35.00 x 9.50 mm, maximum diameter < 55.00 mm Approx. 1.97 x 1.38 x 0.37 inch, maximum diameter < 2.17 inch Refer to the technical drawings below for further information.
POWER	Micro USB (X1): 4.3 V - 5.5 V Generic interface (X2): 3.3 V (pin 19) or 4.3 V - 5.5 V (pin 13) UART (X3): 5 V PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
CURRENT CONSUMPTION	RF field on: 200 mA typically / Sleep: 500 µA typ.
TEMPERATURE RANGE	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
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. 10 g / 0.35 oz
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	1 SAM slot (ID-000 card format)  X1: micro USB, female X2: generic interface (refer to pin assignment in technical drawings below for more information about the available interfaces) X3: UART connector header 4 pos., 1.25 mm pitch, surface mount, right-angle  In the C1 and C2 hardware configurations, the reader modules are equipped with a 24-pin header (no pin header available with the C0 hardware configuration).
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 3 LEGIC M LF HF
CERTIFICATIONS	Non-exhaustive list <sup>2)</sup> : CE/RED, FCC, IC, REACH and RoHS-III compliant
ORDER CODES	T43O-B6C0            Reader module in standard configuration T43O-B6C0-P        Reader module with P option  Order codes for C1 and C2 hardware configurations on request.

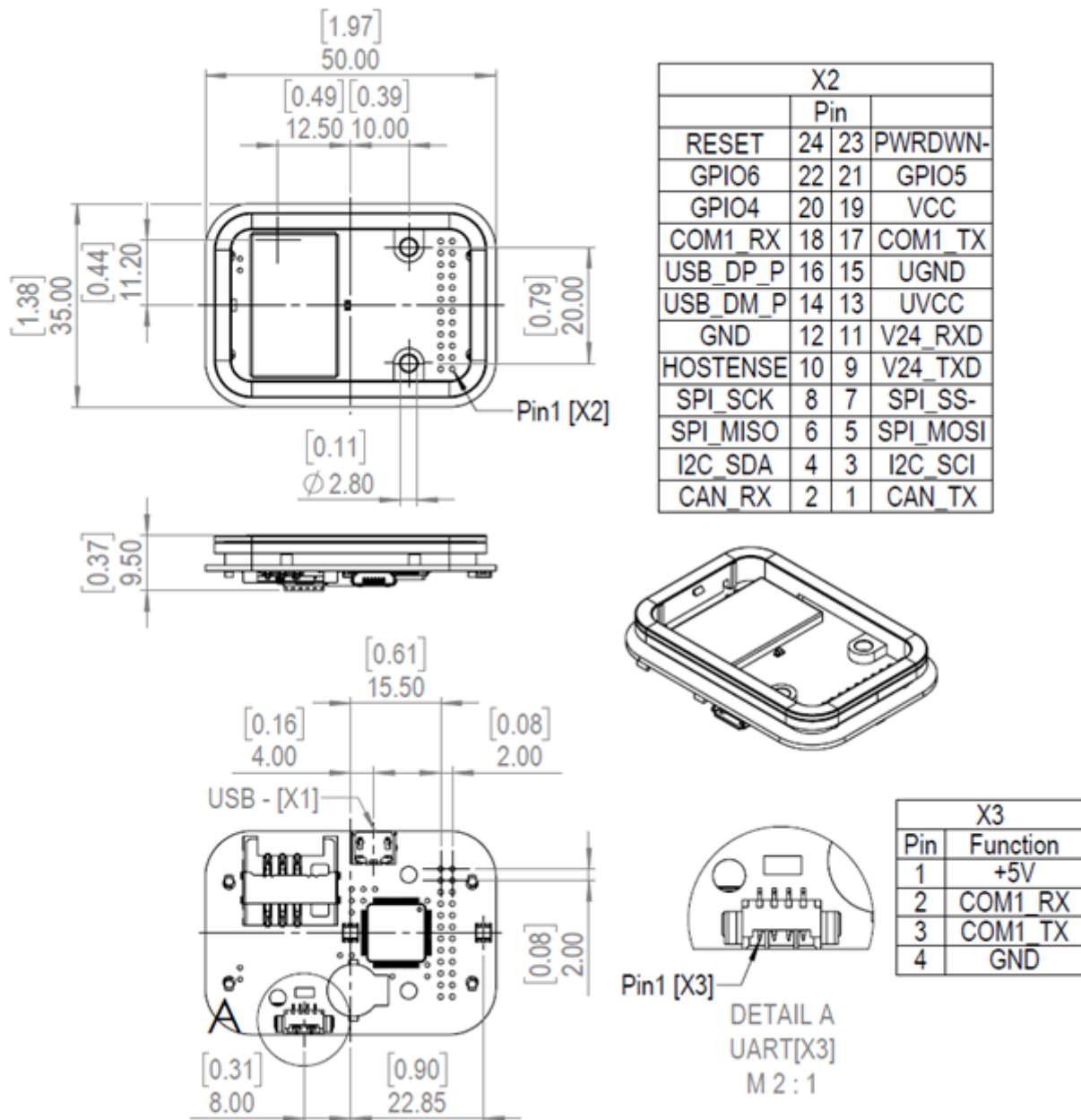
<sup>1)</sup>On request

<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

CABLES	ELATEC RFID modules can be delivered with additional cables. 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

ELATEC reserves the right to change any information or data in this document without prior notice. ELATEC declines all responsibility for the use of this product with any other specification but the one mentioned above. Any additional requirement for a specific customer application has to be validated by the customer himself at his own responsibility. Where application information is given, it is only advisory and does not form part of the specification. Disclaimer: All names used in this document are registered trademarks of their respective owners.