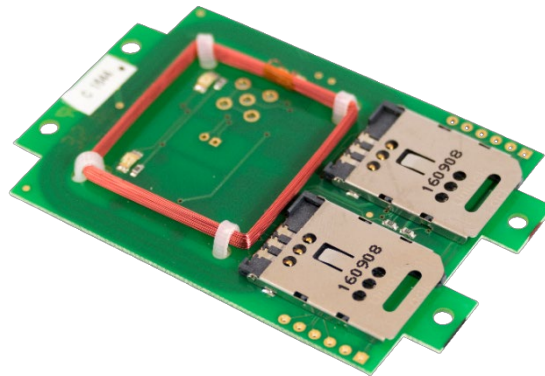# TWN4 MultiTech LEGIC M

(SM-4200/4500 frontend)

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

TWN4 MultiTech LEGIC M
(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
+   Two RFID frequencies (125 kHz/13.56 MHz) and NFC support in a compact form factor for easy integration
+   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
+   Dedicated expansion bus for connection of LCD, mass storage, etc.
+   Support of segment initialization function (LEGIC SM-4500 only)
+   High-level command library for cash / value handling, e.g. electronic purse (LEGIC S-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
DIMENSIONS (L X W X H)	Approx. 76.00 x 49.00 x 14.00 mm / 2.99 x 1.93 x 0.55 inch
POWER	USB: 4.3 V - 5.5 V Connector CNA: 3.3 V ± 5% 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: 140 mA typically
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 (without 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 www.elatec-rfid.com/int/transponder-technology) 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[1], iOS[1], MAC OS X[1]
PERIPHERAL INTERFACES	USB, RS-232, 2x TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I²C, 2 GPIOs, Clock/Data, Wiegand D0/D1, 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 LEGIC M
CERTIFICATIONS	Non-exhaustive list[2]: CE/RED, FCC, IC, TAA compliant, REACH and RoHS-III compliant
ORDER CODES	**Modules with LEGIC SM-4200** T4DO-B Standard reader module T4DO-B-P Reader module with P option **Modules with LEGIC SM-4500** T4BO-B-5 Standard reader module T4BO-B-5P Reader module with P option

[1]On request

[2]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 AND POWER SUPPLIES	ELATEC RFID readers and modules can be delivered with additional cables or external power supplies. Refer to the data sheet *Cables for ELATEC devices* for detailed information.

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