

TWN4 MultiTech SmartCard LEGIC M

Multi-frequency RFID module (LF/HF/NFC) for ISO/IEC 7816 cards



TWN4 MultiTech SmartCard LEGIC M (exemplary illustration)

ELATEC TWN4 MultiTech SmartCard LEGIC M is a combination of the TWN4 MultiTech LEGIC M (RFID) and an integrated contact card reader/writer (ISO 7816). It allows users to read and write to almost any 125 kHz and 13.56 MHz tags and/or labels. It supports all major technologies from various suppliers like ATMEL, EM, ST, NXP, TI, HID, LEGIC, etc. and many ISO standards like ISO 14443A/B (T=CL), ISO 15693 and ISO 18092 / ECMA-340 (NFC). The integrated chip card reader has been designed for easy integration into various applications.

The device can be programmed with a script language for autonomous execution of even complex commands like login procedures, increment/decrement functions and many more. It supports host communication via USB or RS-232.

Special features:

- 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





































TECHNICAL DATA

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FREQUENCIES	125 kHz (LF) / 13.56 MHz (HF)		
ANTENNAS	Integrated		
DIMENSIONS (L X W X H)	Approx. 76.00 x 62.00 x 11.00 mm / 2.99 x 2.44 x 0.43 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		
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 / Min. 100,000 card insertion cycles		
WEIGHT	Approx. 35 g / 1.23 oz		
SMARTCARD STANDARDS	ISO/IEC 7816 Part 1-4, Class A/B/C (5V, 3V, 1.8V), T=0, T=1		
SMARTCARD CLOCK	5 MHz up to 15 MHz		
FREQUENCY			
SUPPORTED SMARTCARDS	5V, 3V and 1.8V, ISO/IEC 7816 Class A/B/C		
POWER TO SMARTCARD	60 mA in Class A; 55 mA in Class B; 35 mA in Class C		
SMARTCARD DETECTION	Card present switch / Automatic power on/off / Short-circuit protection		
SMARTCARD CARD SIZE	2x ID-000 (SAM) ID-1		
SMARTCARD CONTACT TYPE	8-pin sliding contact socket, C4/C8 support ID-1		
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, 2 SAM sockets, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I ² C,		
	2 GPIOs, Clock/Data, Wiegand D0/D1		
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 SmartCard LEGIC M		
CERTIFICATIONS	Non-exhaustive list ²⁾ :		
	CE/RED, REACH and RoHS-III compliant		
ORDER CODES	T4SO-B Standard reader module		
	T4SO-B-P Reader module with P option		
TRANSPONDERS OS SUPPORT PERIPHERAL INTERFACES TRANSMISSION SPEED CERTIFICATION NAME CERTIFICATIONS	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. Windows 7 (32-/64-bit) and higher versions, Linux, Android¹¹, iOS¹¹, MAC OS X¹¹ USB, RS-232, 2 SAM sockets, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), l²C, 2 GPIOs, Clock/Data, Wiegand D0/D1 Host: USB full speed (12 Mbit/s), RS-232: up to 115,200 baud, HF Air: up to 848 kbit/s TWN4 MultiTech SmartCard LEGIC M Non-exhaustive list²¹: CE/RED, REACH and RoHS-III compliant T4SO-B Standard reader module		

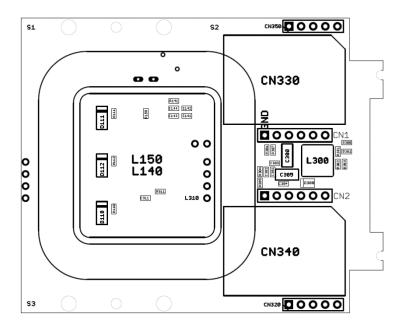
¹)On request

ACCESSORIES

HOLDERS	HOSW-B HOSW-BE2	TWN4 SmartCard housing HIP2, without inlay TWN4 SmartCard housing HIP2, with inlay	
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.		

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.





All measures in mm [inch]

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