

# TWN4 MultiTech SmartCard LEGIC 42

TWN4 SmartCard LEGIC NFC USB

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



TWN4 MultiTech SmartCard LEGIC 42 (exemplary illustration)

ELATEC TWN4 MultiTech SmartCard LEGIC 42 is a combination of the TWN4 MultiTech LEGIC 42 (with LEGIC SM-4200) 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 reader can be programmed with a script language for autonomous execution of even complex commands like login procedures, increment/decrement functions and many more. The reader supports host communication via USB or RS-232.

### Special features:

- 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

































# TECHNICAL DATA

FREQUENCIES	125 kHz (LF) / 13.56 MHz (HF)		
ANTENNAS			
ANTENNAS	Integrated Material: ABS UL94-V0		
HOUSING	Color: black or white		
DIMENSIONS (L X W X H)	Approx. 88.00 x 68.00 x 19.19 mm / 3.46 x 2.68 x 0.76 inch		
DIVIENSIONS (LXWXII)	USB: 4.3 V – 5.5 V		
POWER	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 +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 / Min. 100,000 card insertion cycles		
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WEIGHT SMARTCARD STANDARDS	Approx. 140 g / 4.94 oz (with housing and USB cable)		
	ISO/IEC 7816 Part 1-4, Class A/B/C (5V, 3V, 1.8V), T=0, T=1		
SMARTCARD CLOCK FREQUENCY	5 MHz up to 15 MHz		
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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		
	Depending on the firmware version and installed options, ELATEC readers and modules		
SUPPORTED OPTIONS AND	can support a wide range of RFID technologies. Please refer to the relevant ELATEC		
TRANSPONDERS	transponder matrix (available at <a href="https://www.elatec-rfid.com/int/transponder-technology">www.elatec-rfid.com/int/transponder-technology</a> ) for more		
00.01100007	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 sockets		
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 SmartCard LEGIC NFC USB		
CERTIFICATIONS	Non-exhaustive list <sup>2</sup> ):		
	CE/RED, REACH and RoHS-III compliant		
ORDER CODES	T4SD-BB2BE1 Standard reader, USB cable, black housing		
	T4SD-BB2WE1 Standard reader, USB cable, white housing		
	T4SD-BB2BE1-P Reader with P option, USB cable, black housing		
	T4SD-BB2WE1-P Reader with P option, USB cable, white housing		
	The order codes above describe RFID readers equipped with a two-meter-long cable.		
	Contact ELATEC for other cable lengths.		
¹)On request	-		

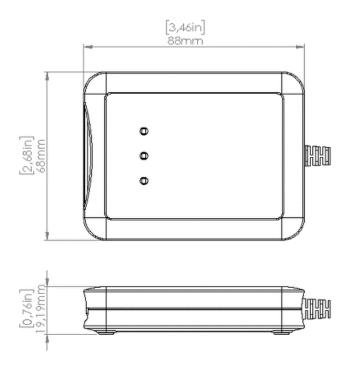
<sup>1)</sup>On request

# **ACCESSORIES**

HOLDERS	HKSD-B HKSD-W	SmartCard holder kit, black SmartCard holder kit, white	
POWER SUPPLIES	ELATEC RFID re	eaders and modules can be delivered with additional cables or external	
	power supplies. Refer to the data sheet Cables for ELATEC devices for detailed		
	information.		

<sup>&</sup>lt;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.





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

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