

TWN4 MULTITECH SMARTCARD LEGIC 42

TWN4 SmartCard LEGIC NFC USB

PROGRAMMABLE RFID/CONTACT READER & WRITER FOR LF/HF/NFC & ISO/IEC7816 CARDS



TWN4 MultiTech SmartCard LEGIC 42, black
(inlay customizable)



TWN4 MultiTech SmartCard LEGIC 42, white
(inlay customizable)

Elatec's TWN4 MultiTech SmartCard LEGIC 42 is a combination of the TWN4 MultiTech LEGIC 42 (RFID) with an integrated contact card reader/writer (ISO7816). It allows users to read and write almost any 125 kHz and 13.56 MHz transponders supporting all major technologies from various suppliers like ATMEL, EM, ST, NXP, TI, HID, LEGIC, etc. and many ISO standards such as ISO14443A/B (T=CL), ISO15693 and ISO18092 / ECMA-340 (NFC). The integrated chip card reader is designed for easy integration into various applications.

The readers 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
- + Direct chip-commands support
- + CCID and PC/SC 2.01
- + Two on-board SAM sockets (Secure Access Module), extendable by 2 SAM sockets
- + 2 GPIOs
- + Supports quick (re)configuration over network and over wireless interface with TWN4 CONFIG Card
- + TWN4 Upgrade Card for P option available on request
- + 3D construction data (STEP) available on request



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

FREQUENCY	125 kHz (LF) / 13.56 MHz (HF)
ANTENNA	Integrated
HOUSING	Material: ABS UL94-V0, color: black or white
DIMENSIONS (L X W X H)	Desktop Reader: 88 mm x 68 mm x 19 mm / 3.46 inch x 2.68 inch x 0.75 inch
POWER SUPPLY	4.3 V - 5.5 V via USB Limited power source according to IEC60950-1 or PS2 classified IEC62368-1, short-circuit current < 8 A
TEMPERATURE RANGE	Operating: -25 °C up to +70 °C (-13 °F up to +158 °F) Storage: -45 °C up to +75 °C (-49 °F up to +167 °F)
RELATIVE HUMIDITY	5% to 95% non-condensing
READ- / WRITE DISTANCE	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. 140 g (with housing and USB cable)
SMARTCARD STANDARDS	ISO/IEC7816 Part 1-4, Class A/B/C (5V, 3V, 1.8V), T=0, T=1
SMARTCARD CLOCK FREQUENCY	5 MHz up to 15 MHz
SUPPORTED SMARTCARDS	5V, 3V and 1.8V, ISO/IEC7816 Class A/B/C
POWER TO SMARTCARD	60mA in Class A; 55mA in Class B; 35mA in Class C
SMARTCARD DETECTION	Card present switch / Automatic power on/off / Short-circuit protection
SMARTCARD CARD SIZE	2xID-000 (SAM) ID-1
SMARTCARD CONTACT TYPE	8 pin Sliding Contact Socket, C4/C8 support ID-1
SUPPORTED TRANSPONDERS (STANDARD) 13.56 MHZ	<p><u>ISO14443A:</u> LEGIC Advant, MIFARE Classic EV1¹⁾, MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2²⁾, MIFARE DESFire Light²⁾, MIFARE Plus S, X, MIFARE Pro X³⁾, MIFARE Smart MX³⁾, MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1¹⁾, NTAG2xx, PayPass³⁾, SLE44R35³⁾, SLE66Rxx (my-d move)³⁾</p> <p><u>ISO14443B:</u> Calypso³⁾, CEPAS³⁾, HID iCLASS⁴⁾, Moneo³⁾, Pico Pass⁴⁾</p> <p><u>ISO18092 ECMA-340:</u> NFC Forum Tag 1-5⁵⁾, Sony FeliCa⁶⁾, NFC Active and passive communication mode, Passive peer-to-peer mode - initiator, NFC Tag 2, 3, 4</p> <p><u>ISO15693:</u> EM4x33³⁾, EM4x35³⁾, HID iCLASS⁴⁾, HID iCLASS SE/SR⁴⁾, ICODE SLI, LEGIC Advant, M24LR16/64, SRF55Vxx (my-d vicinity)³⁾, Tag-it, PicoPass⁴⁾</p> <p><u>LEGIC Prime:</u> LEGIC Prime</p>
SUPPORTED TRANSPONDERS (STANDARD) 125 KHZ ⁷⁾	AWID, Cardax, CASI-RUSCO, Deister ⁸⁾ , EM4100, 4102, 4200 ⁹⁾ , EM4050, 4150, 4450, 4550, EM4305 ¹⁰⁾ , FDX-B ¹⁰⁾ , EM4105 ¹⁰⁾ , HITAG 1 ¹¹⁾ , HITAG 2 ¹¹⁾ , HITAG S ¹¹⁾ , ICT ¹⁰⁾ , IDTECK, Isonas ¹⁰⁾ , Keri, Miro, Nedap ⁸⁾ , PAC ¹⁰⁾ , Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX ¹⁰⁾ , TITAN (EM4050), UNIQUE, ZODIAC
SUPPORTED TRANSPONDERS (OPTION P)	All Standard Transponders, Cotag, G-Prox ⁸⁾ , HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch
OS SUPPORT	Windows XP, Vista, Embedded CE ¹⁰⁾ , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android ¹⁰⁾ , iOS ¹⁰⁾ , MAC OS X ¹⁰⁾
PERIPHERAL INTERFACES	USB, RS232, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I ² C, 2 GPIOs, Clock/Data, Wiegand
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), RS-232: up to 115.200 baud, Air: up to 848 kbit/s
CERTIFICATION NAME	TWN4 SmartCard LEGIC NFC USB
CERTIFICATION(S)	CE/RED, REACH and RoHS-III compliant
ORDER CODE(S)	T4SD-FB2BE1 USB Black T4SD-BB2WE1 USB White

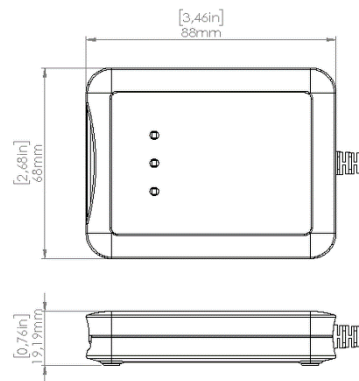
T4SD-BB2BE1-P	USB Option P Black
T4SD-BB2WE1-P	USB Option P White

¹⁾r/w enhanced security features on request ²⁾In preparation ³⁾r/w in direct chip command mode ⁴⁾UID only ⁵⁾NFC Forum Tag 1 not supported ⁶⁾UID + r/w public area ⁷⁾125 kHz technology requires a Russian local test and import license from the ministry of Trade and Industry (MINPROMTORC). This license has to be in place before Elatec can accept any order to be shipped to Russia ⁸⁾Hash value only ⁹⁾Only emulation of 4100, 4102 ¹⁰⁾On request ¹¹⁾Without encryption

ACCESSORIES

CABLES	Model	Description
	CAB-B2:	USB cable type A 200 cm / 78.74 inch
	CAB-B3:	USB cable type A 12 cm / 4.72 inch
	CAB-B4:	USB cable type A 45 cm / 17.72 inch
	CAB-B7:	USB cable type A 120 cm / 47.24 inch
	CAB-M1:	USB cable mini 12 cm / 4.72 inch
	CAB-M2:	USB cable mini 25 cm / 9.84 inch
	CAB-R2:	RS-232 cable 200 cm / 78.74 inch

HOUSING DRAWING



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