

TWN4 MULTITECH LEGIC 42

TWN4 LEGIC NFC

PROGRAMMABLE RFID READER/WRITER FOR LF/HF



TWN4 MultiTech LEGIC 42
(inlay customizable)

Elatec's TWN4 family of transponder readers and writers allows users to read and write to almost any 125 kHz, 134.2 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 ISO14443A/B (T=CL), ISO15693, ISO18092 / 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 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
- + Two on-board SAM sockets (Secure Access Module)
- + CCID and PC/SC 2.01
- + Dedicated expansion bus for connection of LCD, mass storage, etc.
- + 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)	88 mm x 56 mm x 18 mm / 3.5 inch x 2.2 inch x 0.7 inch			
POWER SUPPLY	4.3 V - 5.5 V via USB or RS-232; RS-232 requires 5 V external power supply; via connector CNB 3.3 V +/- 5% Limited power source according to IEC60950-1 or PS2 classified IEC62368-1, short-circuit current < 8 A			
CURRENT CONSUMPTION	RF field on: 140 mA typically			
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			
WEIGHT	Approx. 117 g / 4.13 oz (with cable)			
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, 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, 2 x 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 LEGIC NFC			
CERTIFICATION(S)	CE/RED, FCC, IC, REACH and RoHS-III compliant, and many more			
ORDER CODE(S)	T4DT-BB2BEL	USB Black	T4DT-BB2BEL-P	USB Option P Black
	T4DT-BB2WEL	USB White	T4DT-BB2WEL-P	USB Option P White
	T4DT-BR2BEL	RS-232 Black	T4DT-BR2BEL-P	RS-232 Option P Black
	T4DT-BR2WEL	RS-232 White	T4DT-BR2WEL-P	RS-232 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

HOLDER(S)	HKSI-B:	Snap-In Holder black
	HKSI-W:	Snap-In Holder white
	HKBR-B:	Bracket Holder black
	HKBR-W:	Bracket Holder white
POWER SUPPLY	PWA-EU3:	Power Supply (EU)
	PWA-US3:	Power Supply (US)
	PWA-UK3:	Power Supply (UK)
	PWA-AU3:	Power Supply (AU)
	PWA-JP3:	Power Supply (JP)
CABLES	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

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 Inc.

4203 SW High Meadows Ave
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

No. 716 Industrial Bank Tower
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.