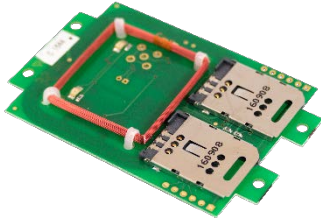


# TWN4 MULTITECH LEGIC 42

## PROGRAMMABLE RFID READER/WRITER FOR LF/HF/NFC



TWN4 MultiTech LEGIC 42  
PCB top view



Desktop version  
(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
- + onboard 18 kB flash storage, e.g. for storing user accessible non-volatile data
- + direct chip-commands support
- + two onboard 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 centralized (re)configuration over network and over wireless interface with TWN4 CONFIG Card
- + 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/134.2 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 56 mm x 18 mm / 3.5 inch x 2.2 inch x 0.7 inch OEM Board: 76 mm x 49 mm x 14 mm / 3.0 inch x 1.9 inch x 0.6 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%										
CURRENT CONSUMPTION	RF field on: 140 mA typically										
TEMPERATURE RANGE	Desktop, Operating: -25 °C up to +70 °C (-13 °F up to +158 °F) Desktop, Storage: -45 °C up to +75 °C (-49 °F up to +167 °F) PCB, Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) PCB, Storage: -45 °C up to +85 °C (-49 °F up to +185 °F)										
RELATIVE HUMIDITY	5% to 95% non-condensing										
READ- / WRITE DISTANCE	Up to 100 mm / 4 inch, depending on environment and transponder										
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), RS-232 up to 115.200 baud; Air: up to 848 kbit/s										
MODES OF OPERATION	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01										
MTBF	500,000 hours										
WEIGHT	Approx. 20 g (without housing)										
SUPPORTED TRANSPONDERS (STANDARD)	<p><u>ISO14443A:</u> LEGIC Advant, LEGIC Prime, MIFARE Classic 1k &amp; 4k EV1<sup>1)</sup>, MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2<sup>1)</sup>, MIFARE Plus S, X, MIFARE Pro X<sup>2)</sup>, MIFARE Smart MX<sup>2)</sup>, MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1, NTAG2xx, PayPass<sup>2)</sup>, SLE44R35, SLE66Rxx (my-d move)<sup>2)</sup></p> <p><u>ISO14443B:</u> Calypso<sup>2)</sup>, CEPAS<sup>2)</sup>, HID iCLASS<sup>3)</sup>, Moneo<sup>2)</sup>, Pico Pass<sup>3)</sup></p> <p><u>ISO18092 ECMA-340:</u> Sony FeliCa<sup>5)</sup>, passive Peer-to-Peer mode - initiator, NFC Tag 2, 3, 4</p> <p><u>ISO15693:</u> EM4x33<sup>2)</sup>, EM4x35<sup>2)</sup>, HID iCLASS<sup>3)</sup>, HID iCLASS SE/SR<sup>3)</sup>, ICODE SLI, LEGIC Advant, M24LR16/64, SRF55Vxx (my-d vicinity)<sup>2)</sup>, Tag-it, PicoPass<sup>3)</sup></p> <p><u>LEGIC Prime:</u> LEGIC Prime</p> <p><u>125 kHz, 134.2 kHz:</u> AWID, Cardax, CASI-RUSCO, Deister<sup>6)</sup>, EM4100, 4102, 4200<sup>7)</sup>, EM4050, 4150, 4450, 4550, EM4305<sup>8)</sup>, FDX-B, EM4105, HITAG 1<sup>9)</sup>, HITAG 2<sup>9)</sup>, HITAG S<sup>9)</sup>, ICT<sup>8)</sup>, IDTECK, Isonas<sup>8)</sup>, Keri, Miro, Nedap<sup>6)</sup>, PAC, Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX, TITAN (EM4050), UNIQUE, ZODIAC</p>										
SUPPORTED TRANSPONDERS (VERSION P)	All Standard Transponder, G-Prox <sup>6)</sup> , HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch										
PERIPHERAL INTERFACES	USB, RS232, 2 x serial (logic level 3.3 V, CMOS 5 V tolerant), I <sup>2</sup> C, 2 GPIOs, Clock/Data, Wiegand, 1-Wire <sup>8)</sup>										
OS SUPPORT	Windows XP, Vista, Embedded CE <sup>8)</sup> , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android <sup>8)</sup> , iOS <sup>8)</sup> , MAC OS X <sup>8)</sup>										
CERTIFICATIONS	RoHS-II compliant, CE, FCC, RED										
ORDER CODE(S)	<table> <tr> <td>T4DO-B</td> <td>OEM Board</td> </tr> <tr> <td>T4DT-BB2BEL</td> <td>USB Black</td> </tr> <tr> <td>T4DT-BB2WEL</td> <td>USB White</td> </tr> <tr> <td>T4DT-BR2BEL</td> <td>RS232 Black</td> </tr> <tr> <td>T4DT-BR2WEL</td> <td>RS232 White</td> </tr> </table>	T4DO-B	OEM Board	T4DT-BB2BEL	USB Black	T4DT-BB2WEL	USB White	T4DT-BR2BEL	RS232 Black	T4DT-BR2WEL	RS232 White
T4DO-B	OEM Board										
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	T4DO-B-P	OEM Board Version P
	T4DT-BB2BEL-P	USB Version P Black
	T4DT-BB2WEL-P	USB Version P White
	T4DT-BR2BEL-P	RS232 Version P Black
	T4DT-BR2WEL-P	RS232 Version P White

<sup>1)</sup>r/w enhanced security features on request <sup>2)</sup>r/w in direct chip command mode <sup>3)</sup>UID only <sup>4)</sup>NFC Forum Tag 1 not supported <sup>5)</sup>UID + r/w public area <sup>6)</sup>Hash value only <sup>7)</sup>Only emulation of 4100, 4102 <sup>8)</sup>On request <sup>9)</sup>Without encryption

## ACCESSORIES

HOLDER	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-EU: Power Supply (EU) PWA-US: Power Supply (US) PWA-UK: Power Supply (UK) PWA-AU: Power Supply (AU) PWA-JP: 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: RS232 cable 200 cm / 78.74 inch