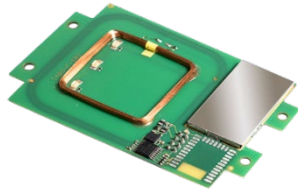


# TWN4 MULTITECH 2 LF

# TWN4 MULTITECH 2 M LF

## 125 KHZ CONTACTLESS READERS/WRITERS



TWN4 MultiTech 2 M LF  
PCB top view



TWN4 MultiTech 2 LF  
(inlay customizable)

The TWN4 MultiTech 2 LF and TWN4 MultiTech 2 M LF readers/writers allow users to read and write to almost any 125 kHz tags and/or labels. They support all major transponder technologies like HID, HITAG, Nexwatch, KERI, Cotag, CASI-RUSCO etc.

The readers provide a powerful API which enables system integrators and solution providers to develop complex applications which can be run directly on the reader.

### 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
- + CCID and PC/SC 2.01
- + 4 GPIOs
- + 3D construction data (STEP) available on request
- + Available as desktop version and PCB module (OEM board)



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)
ANTENNA	Integrated
HOUSING	TWN4 MultiTech 2 LF: material: ABS UL94-V0; color: black or white
DIMENSIONS (L X W X H)	TWN4 MultiTech 2 LF: 88 mm x 56 mm x 18 mm / 3.5 inch x 2.2 inch x 0.7 inch TWN4 MultiTech 2 M LF: 76 mm x 49 mm x 9 mm / 3.0 inch x 1.9 inch x 0.35 inch
POWER SUPPLY	4.3 V - 5.5 V via USB; via generic interface (X2) 3.3 V +/- 5%; RS232 requires 5 V external power supply. Limited power source according to IEC60950-1 or PS2 classified IEC 62368-1, short-circuit current < 8 A
CURRENT CONSUMPTION	RF field on: 90 mA typically
TEMPERATURE RANGE	TWN4 MultiTech 2 LF, Operating: -25 °C up to +70 °C (-13 °F up to +158 °F) TWN4 MultiTech 2 LF, Storage: -45 °C up to +75 °C (-49 °F up to +167 °F) TWN4 MultiTech 2 M LF, Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) TWN4 MultiTech 2 M LF, 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
OPERATING MODES (USB)	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01
MTBF	500,000 hours
WEIGHT	TWN4 MultiTech 2 LF: approx. 116 g / 4.10 oz (with cable) TWN4 MultiTech 2 M LF: approx. 11 g / 0.39 oz (no cable)
SUPPORTED TRANSPONDERS (STANDARD) 125 KHZ <sup>1)</sup>	AWID, Cardax, CASI-RUSCO, Deister <sup>2)</sup> , EM4100, 4102, 4200 <sup>3)</sup> , EM4050, 4150, 4450, 4550, EM4305 <sup>4)</sup> , FDX-B <sup>4)</sup> , EM4105 <sup>4)</sup> , HITAG 1 <sup>5)</sup> , HITAG 2 <sup>5)</sup> , HITAG S <sup>5)</sup> , ICT <sup>4)</sup> , IDTECK, Isonas, Keri, Miro, Nedap <sup>2)</sup> , PAC <sup>4)</sup> , Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX <sup>4)</sup> , TITAN (EM4050), UNIQUE, ZODIAC
SUPPORTED TRANSPONDERS (OPTION P)	All Standard Transponders, Cotag, G-Prox <sup>2)</sup> , 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 <sup>4)</sup> , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android <sup>4)</sup> , iOS <sup>4)</sup> , MAC OS X <sup>4)</sup>
PERIPHERAL INTERFACES	USB, RS232, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I <sup>2</sup> C, 4 GPIOs, Clock/Data, Wiegand
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), RS-232: up to 115.200 baud
CERTIFICATION NAME	TWN4 MultiTech 2 LF TWN4 MultiTech 2 M LF
CERTIFICATION(S)	TWN4 MultiTech 2 LF: CE/RED, FCC, IC, REACH and RoHS-III compliant, and many more TWN4 MultiTech 2 M LF: CE/RED, FCC, IC, REACH and RoHS-III compliant
ORDER CODE(S)	TWN4 MultiTech 2 LF: T4BT-FB2BEL4      USB Black T4BT-FB2WEL4      USB White T4BT-FR2BEL4      RS-232 Black T4BT-FR2WEL4      RS-232 White T4BT-FB2BEL4-P    USB Option P Black T4BT-FB2WEL4-P    USB Option P White T4BT-FR2BEL4-P    RS-232 Option P Black T4BT-FR2WEL4-P    RS-232 Option P White TWN4 MultiTech 2 M LF: T4BO-F4            OEM Board T4BO-F4-P          OEM Board Option P

<sup>1)</sup>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 <sup>2)</sup>Hash value only <sup>3)</sup>Only emulation of 4100, 4102 <sup>4)</sup>On request <sup>5)</sup>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

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