

TWN4 MULTITECH 2 LF TWN4 MULTITECH 2 M LF

125 KHZ CONTACTLESS READERS/WRITERS



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 that 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
- + 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
- + 4 GPIOs
- + 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)
ANTENNA(S)	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	4.3 V - 5.5 V via USB; via generic interface (X1) 3.3 V ± 5%; RS-232 requires 5 V external power supply. Limited power source according to the safety norms listed in the respective declaration of conformity, 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 ¹⁾	AWID, Cardax, CASI-RUSCO, Deister ²⁾ , EM4100, 4102, 4200 ³⁾ , EM4050, 4150, 4450, 4550, EM4305 ⁴⁾ , FDX-B ⁵⁾ , EM4105 ⁵⁾ , UltraProx ⁵⁾ , HITAG 1 ⁶⁾ , HITAG 2 ⁶⁾ , HITAG S ⁶⁾ , ICT ⁷⁾ , IDTECK, Isonas, Keri, Miro, Nedap ²⁾ , PAC ⁷⁾ , Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX ⁵⁾ , TITAN (EM4050), UNIQUE, ZODIAC
SUPPORTED TRANSPONDERS (OPTION P)	All Standard Transponders, Cotag, G-Prox ²⁾ , HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch
OS SUPPORT	Windows Embedded CE ⁷⁾ , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android ⁷⁾ , iOS ⁷⁾ , MAC OS X ⁷⁾
PERIPHERAL INTERFACES	USB, RS-232, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I ² 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)	CE/RED, FCC, IC, and many more ⁸⁾ Both readers are 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

¹⁾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 ²⁾Hash value only ³⁾Only emulation of 4100, 4102 ⁴⁾From FW V4.05 ⁵⁾134.2 kHz only ⁶⁾Without encryption ⁷⁾On request ⁸⁾More information on request

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-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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