

TWN4 MULTITECH 3 M LF

125 KHZ CONTACTLESS READER/WRITER



TWN4 MultiTech 3 M LF
PCB top view*



TWN4 MultiTech 3 M LF
PCB bottom view*

*Product images may show product variants or additional components that are not available.

The TWN4 MultiTech 3 M LF integrates RFID (125 kHz) capabilities into a compact but powerful reader. Its reduced size combined with excellent read/write performance makes it the perfect reader for all applications where small size and full performance matters, e.g. print solutions, healthcare applications, driver identification, POS integration and much more. Furthermore, the TWN4 MultiTech 3 M LF provides access to most common host interfaces such as USB, serial (TTL) or I²C which are readily accessible through an on-board connector.

The TWN4 MultiTech 3 M LF allows users to read and write almost all common worldwide 125 kHz tags and/or labels. It supports all major transponders from various suppliers like HID, HITAG, Nexwatch, KERI, Cotag, CASI-RUSCO etc.

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
- + 3 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

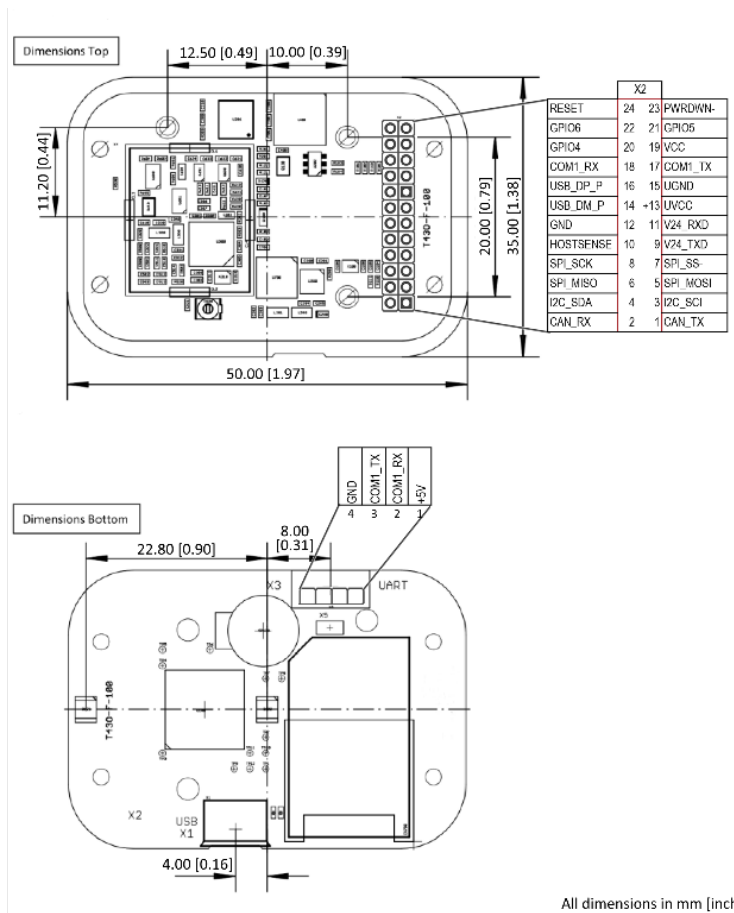
FREQUENCY	125 kHz (LF)
ANTENNA	Integrated
DIMENSIONS (L X W X H)	OEM Board (compact reader): 50 mm x 35 mm x 7 mm, maximum diameter < 55 mm.
POWER SUPPLY	4.3 V - 5.5 V via micro USB; via connector CNB 3.3 V +/- 5% Limited power source according to IEC60950-1 or PS2 classified IEC 62368-1, short-circuit current < 8 A
CURRENT CONSUMPTION	RF field on: 90 mA typically / Sleep: 500 µA typ.
TEMPERATURE RANGE	Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) 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	Approx. 9 g
COMPATIBLE PIN HEADER	PTT-112-01-L-D or TMM-112-03-F-D by Samtec
SUPPORTED TRANSPONDERS (STANDARD) 125 KHZ ¹⁾	AWID, Cardax, CASI-RUSCO, Deister ²⁾ , EM4100, 4102, 4200 ³⁾ , EM4050, 4150, 4450, 4550, EM4305 ⁴⁾ , FDX-B ⁴⁾ , EM4105 ⁴⁾ , HITAG 1 ⁵⁾ , HITAG 2 ⁵⁾ , HITAG S ⁵⁾ , ICT ⁴⁾ , IDTECK, Isonas, Keri, Miro, Nedap ²⁾ , PAC ⁴⁾ , Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX ⁴⁾ , 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 XP, Vista, Embedded CE ⁴⁾ , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android ⁴⁾ , iOS ⁴⁾ , MAC OS X ⁴⁾
PERIPHERAL INTERFACES	USB, RS232, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I ² C, SPI, 3 GPIOs, Clock/Data, Wiegand, 1-Wire ⁴⁾
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), RS-232: up to 115.200 baud
CERTIFICATION NAME	TWN4 MultiTech 3 M LF
CERTIFICATION(S)	CE/RED, FCC Single Modular Approval, IC, REACH and RoHS-III compliant
ORDER CODE(S)	T430-F4C0 OEM Board T430-F4C0-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⁾On request ⁵⁾Without encryption

ACCESSORIES

CABLES	CAB-BS1:	Cable, Slim CC, Micro USB/Mini USB male bent, 10cm / 3.93 inch
	CAB-BS2:	Cable, Slim CC, Micro USB/Mini USB female, 10cm / 3.93 inch
	CAB-BS3:	Cable, Slim CC, Micro USB/USB A male, 12cm / 4.72 inch
	CAB-BS4:	Cable, Slim CC, Micro USB/USB A male, 45cm / 17.7 inch
	CAB-BS5:	Cable, Slim CC, Micro USB/USB A male, 120cm / 47.2 inch
	CAB-BS6:	Cable, Slim CC, Micro USB/USB A male, 200cm / 72.74 inch
	CAB-BS7:	Cable, Slim CC, Micro USB/Mini USB male, 60cm / 23.62 inch

DRAWING / CONNECTOR ASSIGNMENT



All dimensions in mm [inch]

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