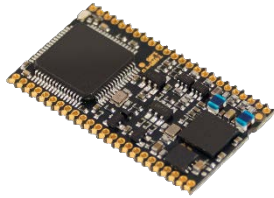
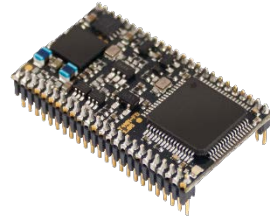


# TWN4 MULTITECH NANO LF

## MINIATURE LF RFID READER/WRITER FOR EXTERNAL ANTENNA



Version B0 (SMT)  
31 x 17.8 x 2.7 mm



Version B1 (THT)  
31 x 17.8 x 8.11 mm

Elatec's TWN4 family of transponder readers and writers allows users to read and write to almost any 125 kHz and 134.2 kHz tags and/or labels. It supports all major transponder technologies like HID, HITAG, Nexwatch, KERI, Cotag, CASI-RUSCO etc.

The TWN4 MultiTech Nano LF is designed for integration into machines or other devices. It can be connected to an external antenna through a printed circuit board (125 kHz/134.2 kHz).

Special features:

- + compact design (31 x 17.8 x 2.7 mm / 1.22 x 0.7 x 0.12 inch)
- + components mounted only on one side for easy integration on the main application
- + edge plated pads for surface mounting (C0) allows easy and reliable PCB mounting, connector option (C1) also available for THT mounting
- + 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
- + supports connection of external ISO7816 compatible SAM cards
- + CCID and PC/SC 2.01
- + 8 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



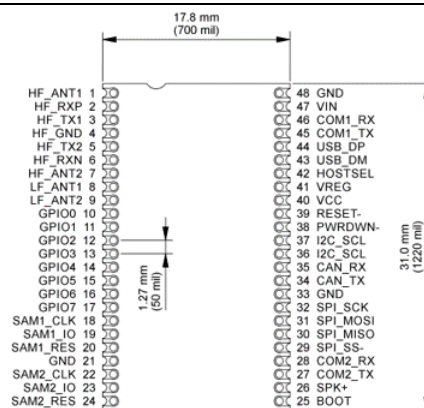
Industrial  
PC

## TECHNICAL DATA

FREQUENCY	125 kHz/134.2 kHz (LF)
ANTENNA	490 µH ± 5% for 125 kHz/134.2 kHz
DIMENSIONS (L X W X H)	31 mm x 17.8 mm x 2.7 mm / 1.22 inch x 0.7 inch x 0.12 inch
POWER SUPPLY	3.3 V +/- 5% (direct supply) or 4.3 V - 5.5 V (use of on-board voltage regulator)
CURRENT CONSUMPTION	RF field on: 80 mA typically / Sleep: 500 µA typ. / Cyclic Operation: TBD
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 antenna, environment and transponder
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), Serial TTL: 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. 7 g
SUPPORTED TRANSPONDERS (STANDARD)	<u>125 kHz, 134.2 kHz:</u> AWID, Cardax, CASI-RUSCO, Deister <sup>1)</sup> , EM4100, 4102, 4200 <sup>2)</sup> , EM4050, 4150, 4450, 4550, EM4305 <sup>3)</sup> , FDX-B, EM4105, HITAG 1 <sup>4)</sup> , HITAG 2 <sup>4)</sup> , HITAG S <sup>4)</sup> , ICT <sup>3)</sup> , IDTECK, Isonas <sup>3)</sup> , Kerl, Miro, Nedap <sup>1)</sup> , PAC, Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX, TITAN (EM4050), UNIQUE, ZODIAC, Cotag, G-Prox <sup>1)</sup>
SUPPORTED TRANSPONDERS (VERSION P)	All Standard Transponder, Cotag, G-Prox <sup>1)</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, 2 x serial (logic level 3.3 V, CMOS 5 V tolerant), I <sup>2</sup> C, SPI, 8 GPIOs, CAN <sup>3)</sup> , Clock/Data, Wiegand, 1-Wire <sup>3)</sup>
OS SUPPORT	Windows XP, Vista, Embedded CE <sup>3)</sup> , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android <sup>3)</sup> , iOS <sup>3)</sup> , MAC OS X <sup>3)</sup>
CERTIFICATIONS	RoHS-II compliant
ORDER CODE(S)	T4NM-FDB0            B0 Standard T4NM-FDB0-P        B0 Version P T4NM-FDB1            B1 Standard T4NM-FDB1-P        B1 Version P

<sup>1)</sup>Hash value only <sup>2)</sup>Only emulation of 4100, 4102 <sup>3)</sup>On request <sup>4)</sup>Without encryption

## DRAWING



Top view

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