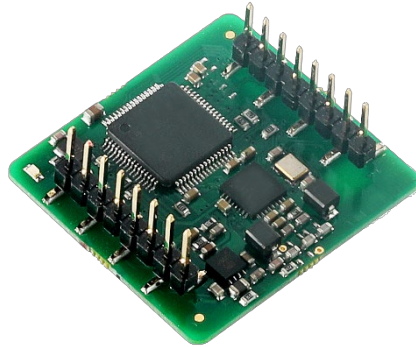


# TWN4 MultiTech HF Mini

(TWN4 Mini Reader MIFARE NFC)

## Single-frequency HF RFID module with NFC support



TWN4 MultiTech HF Mini  
(exemplary illustration)

The RFID modules of the TWN4 MultiTech HF Mini family have been designed for integration into machines, handheld computers or any other device where small size matters. Thanks to their compact dimensions, the modules can be directly integrated into almost any host system. The host communication takes place via SPI or asynchronous serial TTL interface. Besides, the modules offer positions for the placement of two LEDs that can be controlled per software. For applications requiring additional security, an external Secure Access Module (SAM) can be connected.

Key features of the TWN4 MultiTech HF Mini reader module include a powerful SDK for writing apps that are executed directly on the module, the possibility to upgrade the firmware in the field, transparent data exchange with the RFID media, and extremely compact dimensions that enable a module integration even into smaller systems or devices, like PC boards. Additionally, the module can read a lot of HF RFID technologies from the 13.56 MHz frequency band, including NFC. This gives the option to select as many of the technologies required instead of being forced to select just a few ones.

### Special features:

- + Possibility to read many HF RFID technologies
- + Cost-optimized RFID solution with integrated HF antenna (13.56 MHz) and low power consumption for versatile applications
- + Powerful SDK for writing apps which are executed directly on the module
- + Firmware update in the field possible
- + On-board 18 kB flash storage, e.g. for storing user accessible non-volatile data
- + Supports transparent data exchange with RFID media
- + Development board for interface testing 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

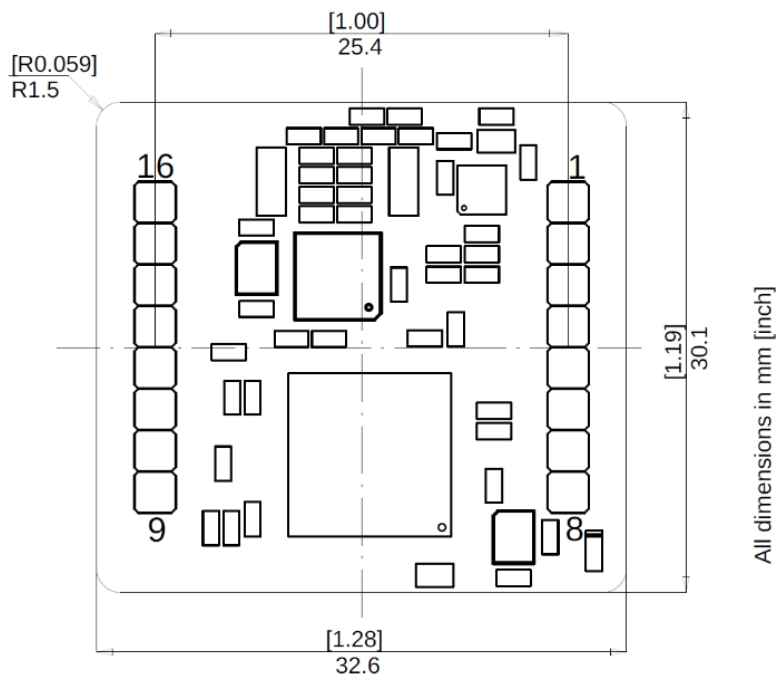
## TECHNICAL DATA

FREQUENCY	13.56 MHz (HF)
ANTENNA	Integrated
DIMENSIONS (L X W X H)	Approx. 32.60 x 30.10 x 11.20 mm / 1.28 x 1.19 x 0.44 inch
POWER	3.15 – 5.5 V DC PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
CURRENT CONSUMPTION	RF field on: 110 mA typically
TEMPERATURE RANGE	Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) Storage: -40 °C up to +85 °C (-40 °F up to +185 °F)
RELATIVE HUMIDITY	5% to 95% non-condensing
READ/WRITE DISTANCE	Up to 70 mm / 2.76 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. 4 g / 0.14 oz
SUPPORTED OPTIONS AND TRANSPONDERS	Depending on the firmware version and installed options, ELATEC readers and modules can support a wide range of RFID technologies. Please refer to the relevant ELATEC transponder matrix (available at <a href="http://www.elatec-rfid.com/int/transponder-technology">www.elatec-rfid.com/int/transponder-technology</a> ) for more information about the available options and RFID technologies supported by the product.
OS SUPPORT	Windows 7 (32-/64-bit) and higher versions, Linux, MAC OS X <sup>1)</sup>
PERIPHERAL INTERFACES	USB, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), SPI <sup>1)</sup> , 4 GPIOs, Clock/Data, Wiegand D0/D1
TRANSMISSION SPEED	Host: USB full speed (12 Mbit/s), TTL serial: up to 115,200 baud, HF Air: up to 848 kbit/s
CERTIFICATION NAME	TWN4 Mini Reader MIFARE NFC
CERTIFICATIONS	Non-exhaustive list <sup>2)</sup> : CE/RED, FCC, IC, REACH and RoHS-III compliant
ORDER CODES	T4MK-F Development board (including T4MR-F) T4MR-F Standard reader module (TTL serial) T4MR-F-U Standard reader module (USB) T4MR-F-I Reader module (TTL serial) with I option T4MR-F-UCCID Reader module (USB CCID) with I option

<sup>1)</sup>On request

<sup>2)</sup>The product has been certified for use in many countries and regions. Contact your Sales representative for detailed information about all certifications and approvals granted to the product.

## TECHNICAL DRAWINGS



All dimensions in mm [inch]

Pin spacing 2.54 mm [0.1 inch]

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