

TWN4 MultiTech 3 M

Multi-frequency RFID module (LF/HF) with NFC and BLE support



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

The powerful reader modules of the ELATEC TWN4 MultiTech 3 family combine a compact form factor with optimized read/write performance. All devices integrate RFID (125 kHz and 13.56 MHz), NFC and, optionally, Bluetooth Low Energy (BLE) capabilities. Thanks to their reduced size, the modules can be easily used for almost all applications where small size and full performance matter. Furthermore, they are compatible with the most common host interfaces, such as USB, and they can also be configured with different connector options.

TWN4 MultiTech 3 M key features 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 a powerful BLE module. Additionally, the module can read more than 60 RFID technologies from low (LF) and high frequency (HF) bands, 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 more than 60 RFID technologies
- Two RFID frequencies (125 kHz/13.56 MHz), NFC and BLE
- Optionally available with a 24-pin header, further configurations available
- 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
- + CCID and PC/SC 2.01
- Optimized read/write performance combined with a compact form factor



































TECHNICAL DATA

TECHNICAL DATA	405 I.H. /I.E.\ /42 EC.MI.L. /I.E.\ / 0.4 O.H. /DI.E.\
FREQUENCIES	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
ANTENNAS	Integrated
DIMENSIONS (L X W X H)	C0 hardware configuration:
	Approx. 50.00 x 35.00 x 9.50 mm, maximum diameter < 55.00 mm
	Approx. 1.97 x 1.38 x 0.37 inch, maximum diameter < 2.17 inch
	Refer to the technical drawings below for further information.
POWER	Micro USB (X1): 4.3 V - 5.5 V
	Generic interface (X2): 3.3 V (pin 19) or 4.3 V - 5.5 V (pin 13)
	UART (X3): 5 V
	PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
CURRENT CONSUMPTION	RF field on: 120 mA typically + 16 mA (BLE) / Sleep: 500 µA typ.
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	LF and HF: up to 100 mm / 4 inch, depending on environment and transponder
	BLE: up to several meters/feet
OPERATING MODES (USB)	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01
BLUETOOTH LOW ENERGY	BLE version 4.1 (upgradable to 4.2)
MTBF	500,000 hours
WEIGHT	Approx. 10 g / 0.35 oz
	Depending on the firmware version and installed options, ELATEC readers and modules
SUPPORTED OPTIONS AND	can support a wide range of RFID technologies. Please refer to the relevant ELATEC
TRANSPONDERS	transponder matrix (available at www.elatec-rfid.com/int/transponder-technology) 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, Android ¹⁾ , iOS ¹⁾ , MAC OS X ¹⁾
PERIPHERAL INTERFACES	1 SAM slot (ID-000 card format)
	X1: micro USB, female
	X2: generic interface (refer to pin assignment in technical drawings below for more
	information about the available interfaces)
	X3: UART connector header 4 pos., 1.25 mm pitch, surface mount, right-angle
	In the C1 and C2 hardware configurations, the reader modules are equipped with a 24-pin
	header (no pin header available with the C0 hardware configuration).
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), RS-232: up to 115,200 baud, HF Air: up to 848 kbit/s,
	BLE Air: up to 100 kbit/s
CERTIFICATION NAME	TWN4 MultiTech 3 M
CERTIFICATIONS	Non-exhaustive list ²):
	CE/RED, FCC, IC, REACH and RoHS-III compliant
ORDER CODES	T430-F7C0 Reader module in standard configuration
	T43O-F7C0-P Reader module with P option
	T43O-F7C0-PI Reader module with PI options
	Order codes for C1 and C2 hardware configurations on request.
¹)On request	

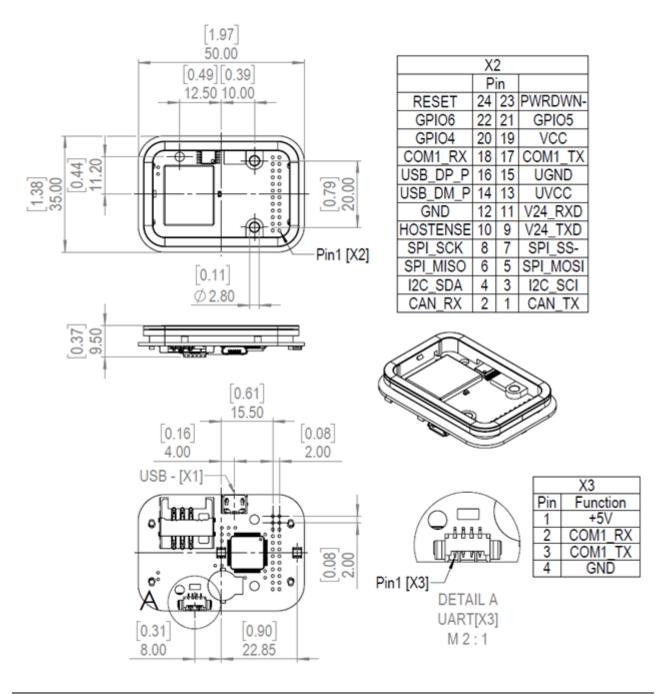
¹⁾On request

ACCESSORIES

CABLES	ELATEC RFID modules can be delivered with additional cables. Refer to the data sheet
	Cables for ELATEC devices for detailed information.

²⁾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.





All measures in mm [inch]

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