

TWN4 MULTITECH 2 HF

TWN4 MULTITECH 2 M HF

13.56 MHZ CONTACTLESS READERS/WRITERS WITH NFC SUPPORT



The TWN4 MultiTech 2 HF and TWN4 MultiTech 2 M HF readers/writers allow users to read and write to almost any 13.56 MHz tags and/or labels. They support all major transponder technologies from various suppliers like EM, Fujitsu, ST, NXP, TI etc. and ISO standards like ISO 14443A/B (T=CL), ISO 15693, ISO 18092 / ECMA-340 (NFC). The latter is supported by mobile phones with Android version 4.3 or greater.

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.

Furthermore, these applications as well as custom configurations can be applied wireless to the readers without plugging them out from the current infrastructure. This can be achieved by using a TWN4 Configuration Card and is a time-saving feature in large projects.

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
- + One on-board SAM socket (Secure Access Module)
- + CCID and PC/SC 2.01
- + 4 GPIOs
- + Supports quick (re)configuration over network and over wireless interface with TWN4 CONFIG Card
- + TWN4 Upgrade Card for I option available on request
- + 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
AttendanceIndustrial
PC

TECHNICAL DATA

FREQUENCY	13.56 MHz (HF)
ANTENNA(S)	Integrated
HOUSING	TWN4 MultiTech 2 HF: material: ABS UL94-V0, color: black or white
DIMENSIONS (L X W X H)	TWN4 MultiTech 2 HF: 88 mm x 56 mm x 18 mm / 3.5 inch x 2.2 inch x 0.7 inch TWN4 MultiTech 2 M HF: 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: 200 mA typically
TEMPERATURE RANGE	TWN4 MultiTech 2 HF, Operating: -25 °C up to +70 °C (-13 °F up to +158 °F) TWN4 MultiTech 2 HF, Storage: -45 °C up to +75 °C (-49 °F up to +167 °F) TWN4 MultiTech 2 M HF, Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) TWN4 MultiTech 2 M HF, 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 HF: approx. 115 g / 4.06 oz (with cable) TWN4 MultiTech 2 M HF: approx. 10 g / 0.36 oz (no cable)
SUPPORTED TRANSPONDERS (STANDARD) 13.56 MHZ	<u>ISO14443A:</u> LEGIC Advant ¹⁾ , MIFARE Classic EV1 ²⁾ , MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2 ³⁾ , MIFARE DESFire Light ⁴⁾ , MIFARE Plus S, X, MIFARE Pro X ⁵⁾ , MIFARE Smart MX ⁵⁾ , MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1 ²⁾ , NTAG2xx, SLE44R35 ⁵⁾ , SLE66Rxx (my-d move) ⁵⁾ , Topaz <u>ISO18092 ECMA-340:</u> NFC Forum Tag 1-5, NFC Peer-to-Peer, Sony FeliCa ⁶⁾ , NFC Active and passive communication mode <u>ISO14443B:</u> Calypso ⁵⁾ , Calypso Innovatron protocol ⁵⁾ , CEPAS ⁵⁾ , HID iCLASS ¹⁾ , Moneo ⁵⁾ , Pico Pass ⁷⁾ , SRI4K, SRIX4K, SRI512, SRT512 <u>ISO15693:</u> EM4x33 ⁵⁾ , EM4x35 ⁵⁾ , HID iCLASS ¹⁾ , HID iCLASS SE/SR ¹⁾ , ICODE SLI, LEGIC Advant ¹⁾ , M24LR16/64, MB89R118/119, SRF55Vxx (my-d vicinity) ⁵⁾ , Tag-it, PicoPass ⁷⁾
SUPPORTED TRANSPONDERS (OPTION I)	Requires TWN4 SIO Card, All Standard Transponders, HID iCLASS, HID iCLASS SE/SR/Elite, HID iCLASS SEOS (CSN & Facility Code/PAC) ⁸⁾
OS SUPPORT	Windows Embedded CE ⁴⁾ , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android ⁴⁾ , iOS ⁴⁾ , MAC OS X ⁴⁾
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, Air: up to 848 kbit/s
CERTIFICATION NAME	TWN4 MultiTech 2 HF TWN4 MultiTech 2 M HF
CERTIFICATION(S)	CE/RED, FCC, IC, and many more ⁹⁾ Both readers are REACH and RoHS-III compliant.

¹⁾UID only ²⁾r/w enhanced security features on request ³⁾EV2/EV3 supported as part of the EV1 downward compatibility ⁴⁾On request ⁵⁾r/w in direct chip command mode ⁶⁾UID + r/w public area ⁷⁾UID only, read/write on request ⁸⁾UID + PAC (Facility Code), r/w on request ⁹⁾More information on request

ORDER CODE(S)	TWN4 MultiTech 2 HF:	
	T4BT-FB2BEL2	USB Black
	T4BT-FB2WEL2	USB White
	T4BT-FR2BEL2	RS-232 Black
	T4BT-FR2WEL2	RS-232 White
	T4BT-FB2BEL2-I	Option I USB Black
	T4BT-FB2WEL2-I	Option I USB White
	T4BT-FR2BEL2-I	Option I RS-232 Black
	T4BT-FR2WEL2-I	Option I RS-232 White
	TWN4 MultiTech 2 M HF:	
T4BO-F2	OEM Board	
T4BO-F2-I	OEM Board Version I	

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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