TWN4 MULTITECH 2 HF

13.56 MHZ CONTACTLESS READER/WRITER WITH NFC SUPPORT

TWN4 MultiTech 2 HF
PCB top view

Desktop version
(inlay customizable)

Elatec's TWN4 MultiTech 2 HF reader/writer allows users to read and write to almost any 13.56 MHz tags and/or labels. It supports all major transponder technologies from various suppliers like EM, Fujitsu, ST, NXP, TI etc. and ISO standards like ISO14443A/B (T=CL), ISO15693, ISO18092 / ECMA-340 (NFC). The latter is supported by mobile phones with Android version 4.3 or greater.

The reader provides a powerful API which 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 reader without plugging it 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
+ onboard 18 kB flash storage, e.g. for storing user accessible non-volatile data
+ direct chip-commands support
+ one onboard 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 Attendance   Industrial PC

TECHNICAL DATA

FREQUENCY	13.56 MHz (HF)
ANTENNA	Integrated
HOUSING	Material: ABS UL94-V0, color: black or white
DIMENSIONS (L X W X H)	Desktop Reader: 88 mm x 56 mm x 18 mm / 3.5 inch x 2.2 inch x 0.7 inch OEM Board: 76 mm x 49 mm x 9 mm / 3.0 inch x 1.9 inch x 0.35 inch
POWER SUPPLY	4.3 V - 5.5 V via USB; via generic interface (X2) 3.3 V +/- 5%; RS232 requires 5 V external power supply
CURRENT CONSUMPTION	RF field on: 120 mA typically
TEMPERATURE RANGE	Desktop, Operating: -25 °C up to +70 °C (-13 °F up to +158 °F) Desktop, Storage: -45 °C up to +75 °C (-49 °F up to +167 °F) PCB, Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) PCB, 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	PCB approx. 10 g / 0.36 oz (no cable) Desktop approx. 115 g / 4.06 oz (with cable)
SUPPORTED TRANSPONDERS (STANDARD) 13.56 MHZ	ISO14443A: LEGIC Advant[1], MIFARE Classic EV1[2], MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2[2], MIFARE DESFire Light[3], MIFARE Plus S, X, MIFARE Pro X[4], MIFARE Smart MX[4], MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1, NTAG2xx, PayPass[4], SLE44R35, SLE66Rxx (my-d move)[4], Topaz ISO14443B: Calypso[4], Calypso Innovatron protocol[4], CEPAS[4], HID iCLASS[1], Moneo[4], Pico Pass[5], SRI4K, SRIX4K, SRI512, SRT512 ISO18092 ECMA-340: NFC Forum Tag 1-5, NFC Peer-to-Peer, Sony FeliCa[6], NFC Active and passive communication mode ISO15693: EM4x33[4], EM4x35[4], HID iCLASS[1], HID iCLASS SE/SR[1], ICODE SLI, LEGIC Advant[1], M24LR16/64, MB89R118/119, SRF55Vxx (my-d vicinity)[4], Tag-it, PicoPass[5]
SUPPORTED TRANSPONDERS (OPTION I)	Requires TWN4 SIO Card, All Standard Transponders, HID iCLASS, HID iCLASS SEOS (CSN & Facility Code/PAC)[7]
OS SUPPORT	Windows XP, Vista, Embedded CE[7], 7 (32-/64-bit), 8, 8.1, 10, Linux, Android[7], iOS[7], MAC OS X[7]
PERIPHERAL INTERFACES	USB, RS-232, TTL serial (logic level 3.3 V, CMOS, 5 V tolerant), I²C, 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
CERTIFICATION(S)	ACMA, CE/RED, FCC, IC, REACH and RoHS-III compliant and many more

ORDER CODE(S)	T4BO-F2	OEM BOARD
	T4BT-FB2BEL2	USB BLACK
	T4BT-FB2WEL2	USB WHITE
	T4BT-FR2BEL2	RS-232 BLACK
	T4BT-FR2WEL2	RS-232 WHITE
	T4BO-F2-I	OEM BOARD OPTION I
	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

[1] UID only [2] r/w enhanced security features on request [3] In preparation [4] r/w in direct chip command mode [5] UID only, read/write on request [6] UID + r/w public area [7] On request

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-AU3:	Power Supply (AU)
	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