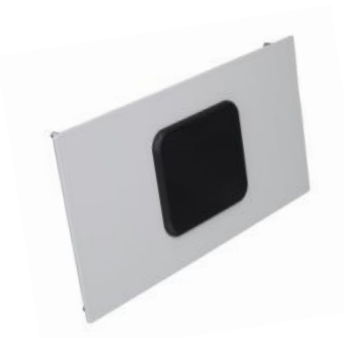


TWN4 MULTITECH PANEL*

125kHz/134.2kHz & 13.56MHz Contactless Reader/Writer

*previously known as TWN4 PANEL MIFARE NFC



Front View





Rear View, Panel not included

Elatec's Vending Machine Kit consists of the TWN4 MULTITECH Core Module with an attached antenna (TWN4 PANEL MULTITECH OEM PCB) in a black rectangular rugged plastic housing. It is ideal for use in vending, kiosk or gaming machines. The housing is rated IP65 from outside and therefore ideal for outdoor usage e.g. in parking systems, EV Chargers etc. The kit comes fully mounted with an USB Type A or a RS232 cable, which can be easily changed due to the flexible connector pinout.

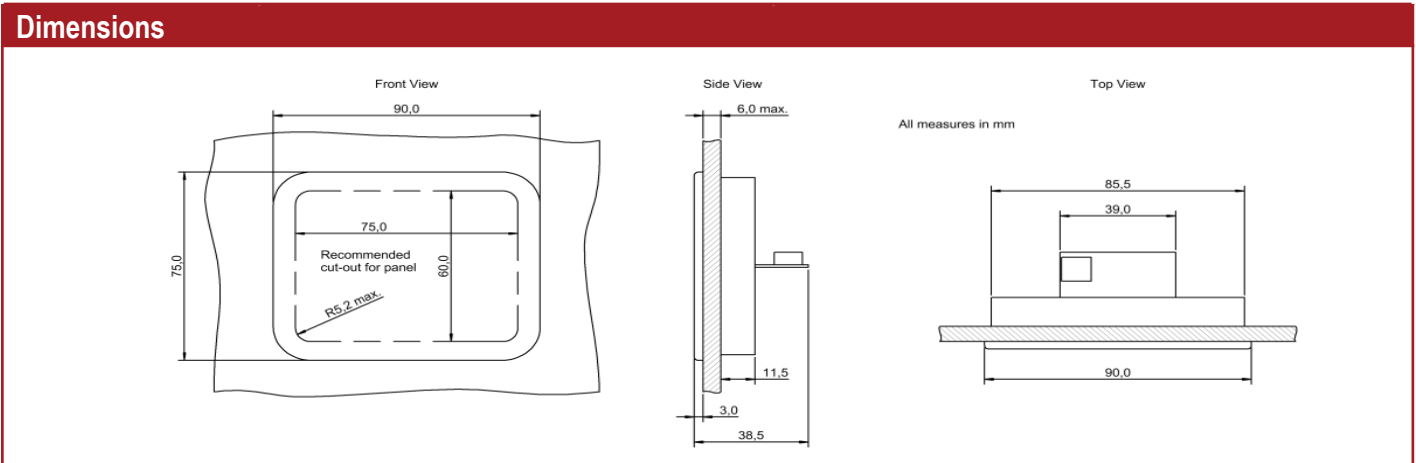
Elatec's TWN4 Panel MULTITECH transponder reader and writer allows users to read and write to almost any 125kHz / 134.2kHz and 13.56MHz tags and/or labels – it supports all major transponders from various suppliers like ATMEL, EM, ST, NXP, TI, HID, LEGIC, etc. and ISO standards like ISO14443A (T=CL), ISO14443B (T=CL), ISO15693, ISO18092 / ECMA-340 (NFC).

Special Features:

- Powerful SDK for writing Apps which are executed directly on the reader
- Infield Upgradeable
- Direct chip-commands support
- Onboard 18kB flash storage
- CCID and PC/SC 2.01¹⁾
- Interfaces:
 - USB, RS232, Serial (logical level 3.3V, CMOS 5V tolerant), I²C, SPI²⁾, Clock/Data³⁾, Wiegand³⁾, 1-Wire²⁾
- Dedicated expansion bus for connection of LCD, mass storage, etc.
- Step Model Data on request

Technical Data ⁴⁾				
Frequency	125kHz, 134.2kHz (LF) / 13.56MHz (HF)			
Antenna	Aircoil (125kHz) and PCB (13.56MHz)			
Housing	Plastic, black			
Power Supply	4.3V..5.5V via USB or RS232; RS232 requires external power supply; via connector CNB 3.3V +/- 5%			
Current Consumption	Depending on antenna: RF field on: 120mA typically / Sleep: 500µA 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)			
Read- / Write Distance	Up to 100mm / 4inch, depending on antenna and tag			
HOST Interface	USB, RS232, serial (logical level 3.3V, CMOS 5V tolerant), I ² C, SPI ²⁾ , Clock/Data ³⁾ , Wiegand ³⁾ , 1-Wire ²⁾ CAN, RS422/485 require adapter board			
OS Support	Windows XP, Vista, Embedded CE ²⁾ , 7(32-/64-bit), 8, 8.1,10, Linux, Android, iOS ²⁾ , MAC OS X ²⁾			
Transmission Speed	HOST: USB: Full speed (12Mbit) – RS232: up to 115.200baud AIR: up to 848Kbit/s			
Modes of Operation	USB key board emulation – USB virtual COM port – Transparent – CCID mode / PC/SC 2.01 ¹⁾			
Relative Humidity	5% to 95% non-condensing			
Supported Transponder	<p>Standard</p> <ul style="list-style-type: none"> 125kHz / 134.2kHz: 4100, 4102, 4200¹⁰⁾, 4050, 4150, 4450, 4550, AWID, CASI-RUSCO, HITAG 1¹¹⁾, HITAG 2¹¹⁾, HITAG S¹¹⁾, Keri, Miro, Pyramid, TIRIS/HDX, UNIQUE, FDX-B, Q5, TITAN, T55x7, ZODIAC <u>Optionally, in consideration:</u> 4305, Cardax, IDTECK 13.56MHz / ISO14443A: MIFARE Classic 1k & 4k EV1⁷⁾, Mini, DESFire EV1, Plus S&X, Pro X⁸⁾, SmartMX, Ultralight, Ultralight EV1⁷⁾, Ultralight C, SLE44R35, SLE66Rxx (my-d move)⁸⁾, LEGIC Advant⁵⁾, PayPass, NTAG2XX⁷⁾ 13.56MHz / ISO14443B: Calypso⁸⁾ incl. Innovatron radio protocol 14443-B⁶⁾, CEPAS⁸⁾, HID iCLASS⁵⁾, Moneo⁸⁾, PicoPass⁸⁾, SRI512, SRT512, SRI4K, SRIX4K 13.56MHz / ISO15693: EM4x33⁸⁾, EM4x35⁸⁾, HID iCLASS⁵⁾, ICODE SLI, LEGIC Advant⁵⁾, M24LR16/64, Tag-it, SRF55Vxx (my-d vicinity)⁸⁾, PicoPass⁸⁾ 13.56MHz / ISO18092 / NFC: NFCIP-1: Active and passive communication mode, Peer-to-Peer, NFC Forum Tag Type 1-4, Sony FeliCa⁹⁾ <p>Version P Standard+Cogtag, G-Prox¹²⁾, HID (Prox, Prox II, Duo Prox II, ISO Prox II, Micro Prox, ProxKey), Honeywell NexWatch, Indala, ioProx</p>			
Certifications ⁴⁾	CE, R&TTE, RoHS-II compliant			
MTBF	500.000 hours			
Order Code	Standard: T4PO-F Version P: T4PO-F-P	USB (0.45m/17.7inch) Standard: T4PA-FB6B Version P: T4PA-FB6B-P	RS232 (2.0m/78.7inch) T4PA-FR2B T4PA-FR2B-P	
Description	TWN4 MultiTech Panel OEM PCB (46x56x38mm) (1.81x2.20x1.50inch)		TWN4 MultiTech Panel OEM PCB including housing/cable	
Weight	Approx. 15g	Approx. 150g		

In Preparation ²⁾On Request Only ³⁾External Interface Required ⁴⁾Target Specification ⁵⁾UID Only ⁶⁾UID Only, read/write On Request ⁷⁾r/w enhanced security features on request ⁸⁾r/w in direct chip command mode ⁹⁾UID + r/w public area ¹⁰⁾Only emulation of 4100,4102 ¹¹⁾Without encryption mode ¹²⁾Hash Value Only



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