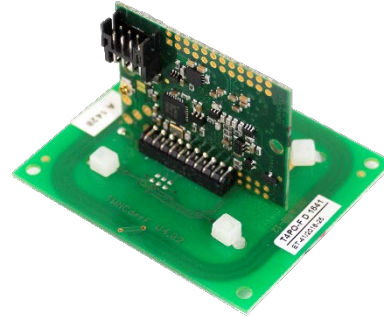


# TWN4 MULTITECH PANEL

## PROGRAMMABLE WATER AND DUST PROOF RFID PANEL READER/WRITER FOR LF/HF/NFC



TWN4 MultiTech Panel  
Desktop version



TWN4 MultiTech Panel  
PCB version

Elatec's Vending Machine Kit consists of the TWN4 MultiTech Core Module with an attached antenna (TWN4 MultiTech Panel 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 RS-232 cable, which can be easily changed due to the flexible connector pinout.

The TWN4 MultiTech Panel transponder reader and writer allow users to read and write to almost any 125 kHz, 134.2 kHz and 13.56 MHz 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/B (T=CL), ISO15693, ISO18092 / ECMA-340 (NFC).

### 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
- + CCID and PC/SC 2.01
- + dedicated expansion bus for connection of LCD, mass storage, etc.
- + 8 GPIOs
- + supports quick centralized (re)configuration over network and over wireless interface with TWN4 CONFIG Card
- + 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



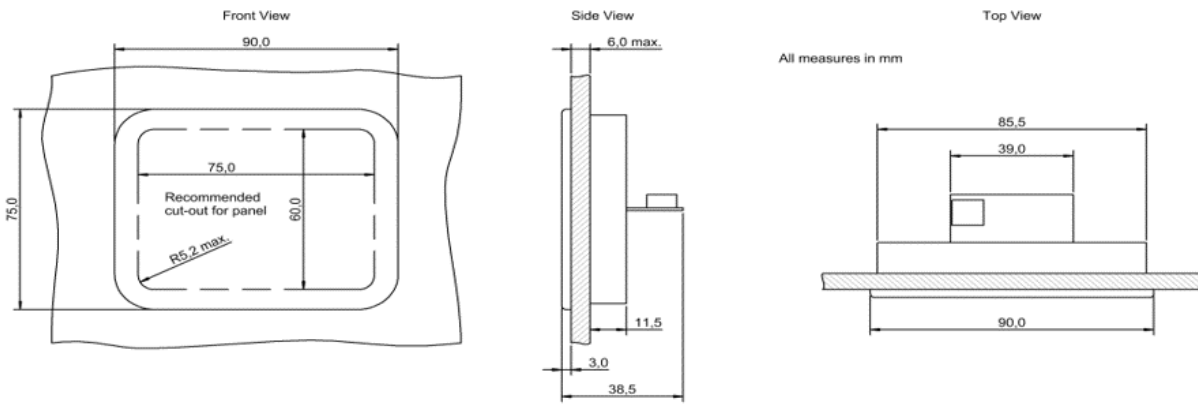
Industrial  
PC

## TECHNICAL DATA

FREQUENCY	125 kHz/134.2 kHz (LF) / 13.56 MHz (HF)												
ANTENNA	Aircoil (125 kHz/134.2 kHz) and PCB (13.56 MHz)												
HOUSING	Plastic, black												
DIMENSIONS (L X W X H)	46 mm x 56 mm x 38 mm / 1.81 inch x 2.20 inch x 1.50 inch												
POWER SUPPLY	4.3 V - 5.5 V via USB or RS-232; RS-232 requires 5 V external power supply; via connector CNB 3.3 V +/- 5%												
CURRENT CONSUMPTION	RF field on: 120 mA typically / Sleep: 500 µA 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)												
RELATIVE HUMIDITY	5% to 95% non-condensing												
READ- / WRITE DISTANCE	Up to 100 mm / 4 inch, depending on environment and transponder												
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), RS-232 up to 115.200 baud; Air: up to 848 kbit/s												
MODES OF OPERATION	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01												
MTBF	500,000 hours												
WEIGHT	Approx. 15 g (without housing)												
SUPPORTED TRANSPONDERS (STANDARD)	<p><u>ISO14443A:</u> LEGIC Advant<sup>1)</sup>, MIFARE Classic 1k &amp; 4k EV1<sup>2)</sup>, MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2<sup>2)</sup>, MIFARE Plus S, X, MIFARE Pro X<sup>3)</sup>, MIFARE Smart MX<sup>3)</sup>, MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1, NTAG2xx, PayPass<sup>3)</sup>, SLE44R35, SLE66Rxx (my-d move)<sup>3)</sup>, Topaz</p> <p><u>ISO14443B:</u> Calypso<sup>3)</sup>, Calypso Innovatron protocol<sup>3)</sup>, CEPAS<sup>3)</sup>, HID iCLASS<sup>1)</sup>, Moneo<sup>3)</sup>, Pico Pass<sup>4)</sup>, SRI4K, SRIX4K, SRI512, SRT512</p> <p><u>ISO18092 ECMA-340:</u> NFC Forum Tag 1-5, NFC Peer-to-Peer, Sony FeliCa<sup>5)</sup>, NFC Active and passive communication mode</p> <p><u>ISO15693:</u> EM4x33<sup>3)</sup>, EM4x35<sup>3)</sup>, HID iCLASS<sup>1)</sup>, HID iCLASS SE/SR<sup>1)</sup>, ICODE SLI, LEGIC Advant<sup>1)</sup>, M24LR16/64, SRF55Vxx (my-d vicinity)<sup>3)</sup>, Tag-it, PicoPass<sup>4)</sup></p> <p><u>125 kHz, 134.2 kHz:</u> AWID, Cardax, CASI-RUSCO, Deister<sup>6)</sup>, EM4100, 4102, 4200<sup>7)</sup>, EM4050, 4150, 4450, 4550, EM4305<sup>8)</sup>, FDX-B, EM4105, HITAG 1<sup>9)</sup>, HITAG 2<sup>9)</sup>, HITAG S<sup>9)</sup>, ICT<sup>8)</sup>, IDTECK, Isonas<sup>8)</sup>, Keri, Miro, Nedap<sup>6)</sup>, PAC, Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX, TITAN (EM4050), UNIQUE, ZODIAC</p>												
SUPPORTED TRANSPONDERS (VERSION P)	All Standard Transponder, Cotag, G-Prox <sup>6)</sup> , HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch												
PERIPHERAL INTERFACES	USB, RS232, 8 GPIOs, Clock/Data, Wiegand, 1-Wire <sup>8)</sup>												
OS SUPPORT	Windows XP, Vista, Embedded CE <sup>8)</sup> , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android <sup>8)</sup> , iOS <sup>8)</sup> , MAC OS X <sup>8)</sup>												
CERTIFICATIONS	RoHS-II compliant, CE, RED												
ORDER CODE(S)	<table> <tr> <td>T4PO-F</td> <td>OEM Board</td> </tr> <tr> <td>T4PA-FB6B</td> <td>USB Black</td> </tr> <tr> <td>T4PA-FR2B</td> <td>RS232 Black</td> </tr> <tr> <td>T4PO-F-P</td> <td>OEM Board Version P</td> </tr> <tr> <td>T4PA-FB6B-P</td> <td>USB Version P Black</td> </tr> <tr> <td>T4PA-FR2B-P</td> <td>RS232 Version P Black</td> </tr> </table>	T4PO-F	OEM Board	T4PA-FB6B	USB Black	T4PA-FR2B	RS232 Black	T4PO-F-P	OEM Board Version P	T4PA-FB6B-P	USB Version P Black	T4PA-FR2B-P	RS232 Version P Black
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<sup>1)</sup>UID only <sup>2)</sup>r/w enhanced security features on request <sup>3)</sup>r/w in direct chip command mode <sup>4)</sup>UID only, read/write on request <sup>5)</sup>UID + r/w public area <sup>6)</sup>Hash value only <sup>7)</sup>Only emulation of 4100, 4102 <sup>8)</sup>On request <sup>9)</sup>Without encryption

# HOUSING DRAWING



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