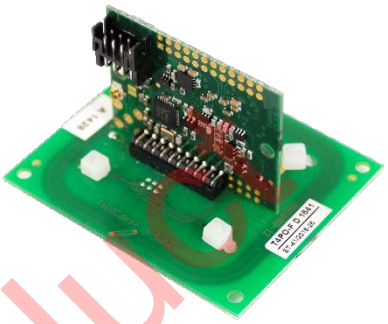
TWN4 MULTITECH PANEL

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

TWN4 MultiTech Panel
Desktop version



TWN4 MultiTech Panel
PCB version

EOL product

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

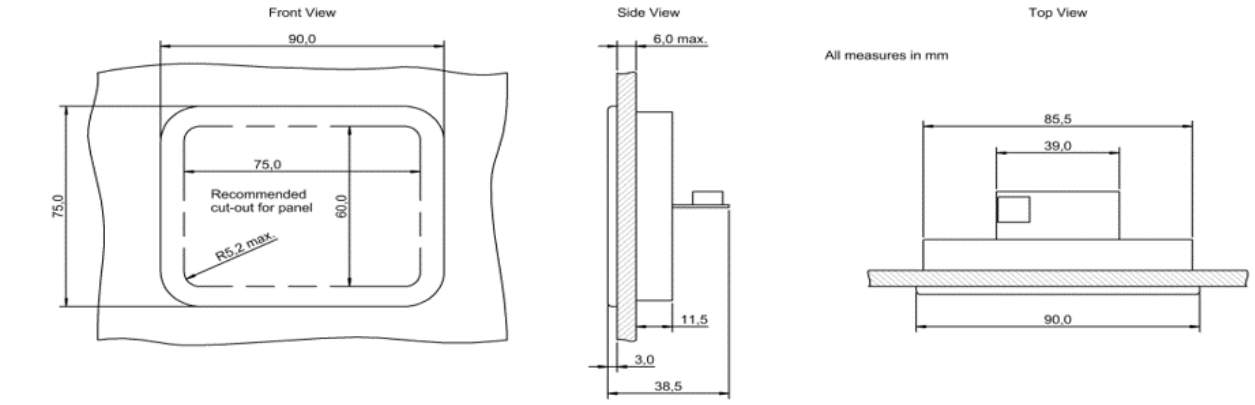
TECHNICAL DATA

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 m x 56 m 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)	ISO14443A: LEGIC Advant[1], MIFARE Classic 1k & 4k EV1[2], MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2[2], MIFARE Plus S, X, MIFARE Pro X[3], MIFARE Smart MX[3], MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1, NTAG2xx, PayPass[3], SLE44R35, SLE66Rxx (my-d move)[3], Topaz ISO14443B: Calypso[3], Calypso Innovatron protocol[3], CEPAS[3], HID iCLASS[1], Moneo[3], Pico Pass[4], SRI4K, SRIX4K, SRI512, SRT512 ISO18092 ECMA-340: NFC Forum Tag 1-5, NFC Peer-to-Peer, Sony FeliCa[5], NFC Active and passive communication mode ISO15693: EM4x33[3], EM4x35[3], HID iCLASS[1], HID iCLASS SE/SR[1], ICODE SLI, LEGIC Advant[1], M24LR16/64, SRF55Vxx (my-d vicinity)[3], Tag-it, PicoPass[4] 125 kHz, 134.2 kHz: AWID, Cardax, CASI-RUSCO, Deister[6], EM4100, 4102, 4200[7], EM4050, 4150, 4450, 4550, EM4305[8], FDX-B, EM4105, HITAG 1[9], HITAG 2[9], HITAG S[9], ICT[8], IDTECK, Isonas[8], Keri, Miro, Nedap[6], PAC, Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX, TITAN (EM4050), UNIQUE, ZODIAC
SUPPORTED TRANSPONDERS (VERSION P)	All Standard Transponder, Cotag, G-Prox[6], 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[8]
OS SUPPORT	Windows XP, Vista, Embedded CE[8], 7 (32-/64-bit), 8, 8.1, 10, Linux, Android[8], iOS[8], MAC OS X[8]
CERTIFICATIONS	RoHS-II compliant, CE, RED
ORDER CODE(S)	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

[1]UID only [2]r/w enhanced security features on request [3]r/w in direct chip command mode [4]UID only, read/write on request [5]UID + r/w public area [6]Hash value only [7]Only emulation of 4100, 4102 [8]On request [9]Without encryption

EOL product

HOUSING DRAWING



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