TWN4 SLIM

FLAT AND COMPACT RFID READER/WRITER SUPPORTING LF, HF, NFC AND BLE

TWN4 Slim – front view

TWN4 Slim – rear view

The new TWN4 Slim is Elatec's smallest compact and flat RFID reader – it's smaller than an ID-1 card. TWN4 Slim supports a huge range of LF and HF technologies (125 kHz and 13.56 MHz). With the support of NFC and Bluetooth Low Energy the reader supports mobile use cases for data communication and authentication. It can be operated as a standalone unit connected using a standard cable with a micro USB plug to PCs and other devices with USB interface.

TWN4 Slim is perfectly suited to embed it into machines and devices, and especially MFP printers with optional clip-on snap-in cover.

Special features:

+ Standalone operation and flush-mount integration into printers and other industrial applications
+ Mounting holes for easy and fast installation
+ Integrated LF and HF antennas
+ One socket for Secure Access Modules (SAM) cards, ID-000 form factor
+ Flexible cable with micro USB connector
+ Supported USB stacks: keyboard emulation, virtual comport and CCID/PCSC
+ Integrated BLE module 2.4 GHz for data communication and authentication, BLE v4.2, upgradable
+ Supports quick (re)configuration over network and over wireless interface with TWN4 CONFIG Card
+ Direct chip-commands support
+ Powerful SDK for writing apps which are executed directly on the reader
+ On-board 18 kB flash storage, e.g. for storing user accessible non-volatile data
+ TWN4 Upgrade Card for P and PI options available on request
+ Customizable design inlay
+ 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
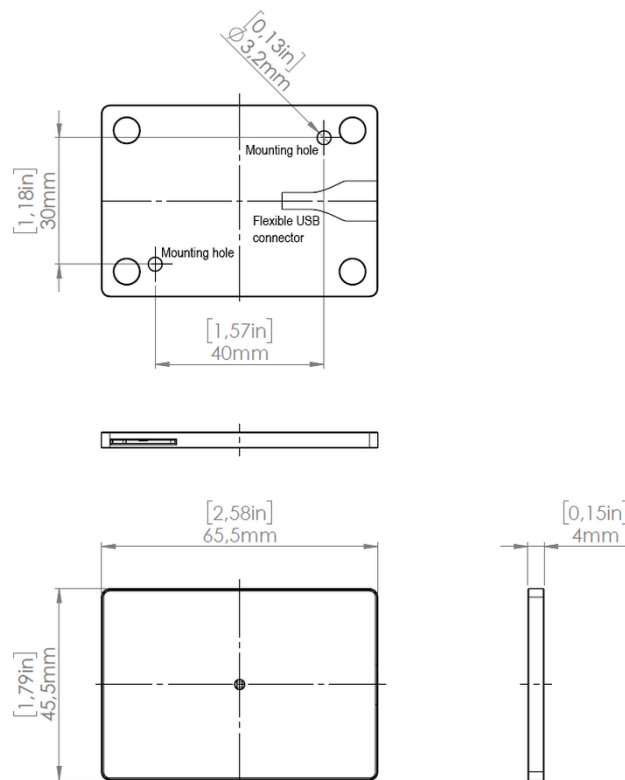
TECHNICAL DATA

FREQUENCY	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
ANTENNA	Integrated
HOUSING	ABS+PC blend, UL94-V0, color: black (core unit, clip adapter). Two 3.2 mm (0.13 inch) mounting holes for OEM integration (requires special inlay)
DIMENSIONS (L X W X H)	65.5 mm x 45.5 mm x 4.0 mm / 2.6 inch x 1.8 inch x 0.16 inch
POWER SUPPLY	4.3 V - 5.5 V via micro USB Limited power source according to IEC60950-1 or PS2 classified IEC 62368-1, short-circuit current < 8 A
CURRENT CONSUMPTION	Idle: 70 mA, RF field on: 135 mA typically (preliminary)
TEMPERATURE RANGE	Operating: -20 °C up to +60 °C (-4 °F up to +140 °F) Storage: -30 °C up to +70 °C (-22 °F up to +158 °F)
RELATIVE HUMIDITY	5% to 95% non-condensing
READ- / WRITE DISTANCE	LF and HF: Up to 80 mm / 3.15 inch, depending on environment and transponder
OPERATING MODES (USB)	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01
BLUETOOTH LOW ENERGY	Bluetooth v4.2, software upgradable; standards as GAP, SM, L2CAP, ATT; predefined GATT structure; AES128 supported
MTBF	500,000 hours
WEIGHT	Approx. 18 g / 0.64 oz (without cable and holder)
SUPPORTED TRANSPONDERS (STANDARD) 13.56 MHZ	ISO14443A: LEGIC Advant[1], MIFARE Classic EV1[2], MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2[3], MIFARE DESFire Light[3], MIFARE Plus S, X, MIFARE Pro X[4], MIFARE Smart MX[4], MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1[2], NTAG2xx, PayPass[4], SLE44R35[4], 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 (STANDARD) 125 KHZ[7]	AWID, Cardax, CASI-RUSCO, Deister[8], EM4100, 4102, 4200[9], EM4050, 4150, 4450, 4550, EM4305[10], FDX-B[10], EM4105[10], HITAG 1[11], HITAG 2[11], HITAG S[11], ICT[10], IDTECK, Isonas, Keri, Miro, Nedap[8], PAC[10], Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX[10], TITAN (EM4050), UNIQUE, ZODIAC
SUPPORTED TRANSPONDERS (OPTION PI)	Requires TWN4 SIO Card, All Standard Transponders, All Option P Transponders, HID iCLASS, HID iCLASS SE/SR/Elite, HID iCLASS SEOS (Facility Code/PAC)[12]
SUPPORTED TRANSPONDERS (OPTION P)	All Standard Transponders, Cotag, G-Prox[8], HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch
OS SUPPORT	Windows XP, Vista, Embedded CE[10], 7 (32-/64-bit), 8, 8.1, 10, Linux, Android[10], iOS[10], MAC OS X[10]
PERIPHERAL INTERFACES	Female micro USB, flexible cable, use only with CAB-BS1 – CAB-BS7 shielded cables
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), HF Air: up to 848 kbit/s, BT Air: up to 100 kbit/s
CERTIFICATION NAME	TWN4 Slim
CERTIFICATION(S)	ACMA, CE/RED, FCC, IC, REACH and RoHS-III compliant
ORDER CODES	**Standalone reader without cable** T4QC-FC3B7 TWN4 Slim T4QC-FC3B7-P TWN4 Slim, Option P T4QC-FC3B7-PI TWN4 Slim, Option PI

[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]125 kHz technology requires a Russian local test and import license from the ministry of Trade and Industry (MINPROMTORC). This license has to be in place before Elatec can accept any order to be shipped to Russia [8]Hash value only [9]Only emulation of 4100, 4102 [10]On request [11]Without encryption [12]UID + PAC (Facility Code), r/w on request

ACCESSORIES	HFQC-B:	TWN4 Slim Mounting Frame black
	MECH-QHC1B:	TWN4 Slim HIP1 Cover
	MECH-QHC2B:	TWN4 Slim HIP2 Cover
	MECH-QRBF1:	TWN4 Slim Rubber Feet 4pcs/set
	MECH-CCK3:	Cable Clip Kit adhesive black (3pcs)
CABLES	CAB-BS1:	Cable, Slim CC, Micro USB/Mini USB male bent, 10cm / 3.93 inch
	CAB-BS2:	Cable, Slim CC, Micro USB/Mini USB female, 10cm / 3.93 inch
	CAB-BS3:	Cable, Slim CC, Micro USB/USB A male, 12cm / 4.72 inch
	CAB-BS4:	Cable, Slim CC, Micro USB/USB A male, 45cm / 17.7 inch
	CAB-BS5:	Cable, Slim CC, Micro USB/USB A male, 120cm / 47.2 inch
	CAB-BS6:	Cable, Slim CC, Micro USB/USB A male, 200cm / 72.74 inch
	CAB-BS7:	Cable, Slim CC, Micro USB/Mini USB male, 60cm / 23.62 inch
KITS	Individual kits available on request. Kits are a compilation of the TWN4 Slim reader, accessories and packaging configuration (Boxed or bulk packaging). After the configuration of the Slim Kit, customers receive their own article number.	

DRAWING

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