

# 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 stand-alone 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 fast (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
- + Onboard 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) on request

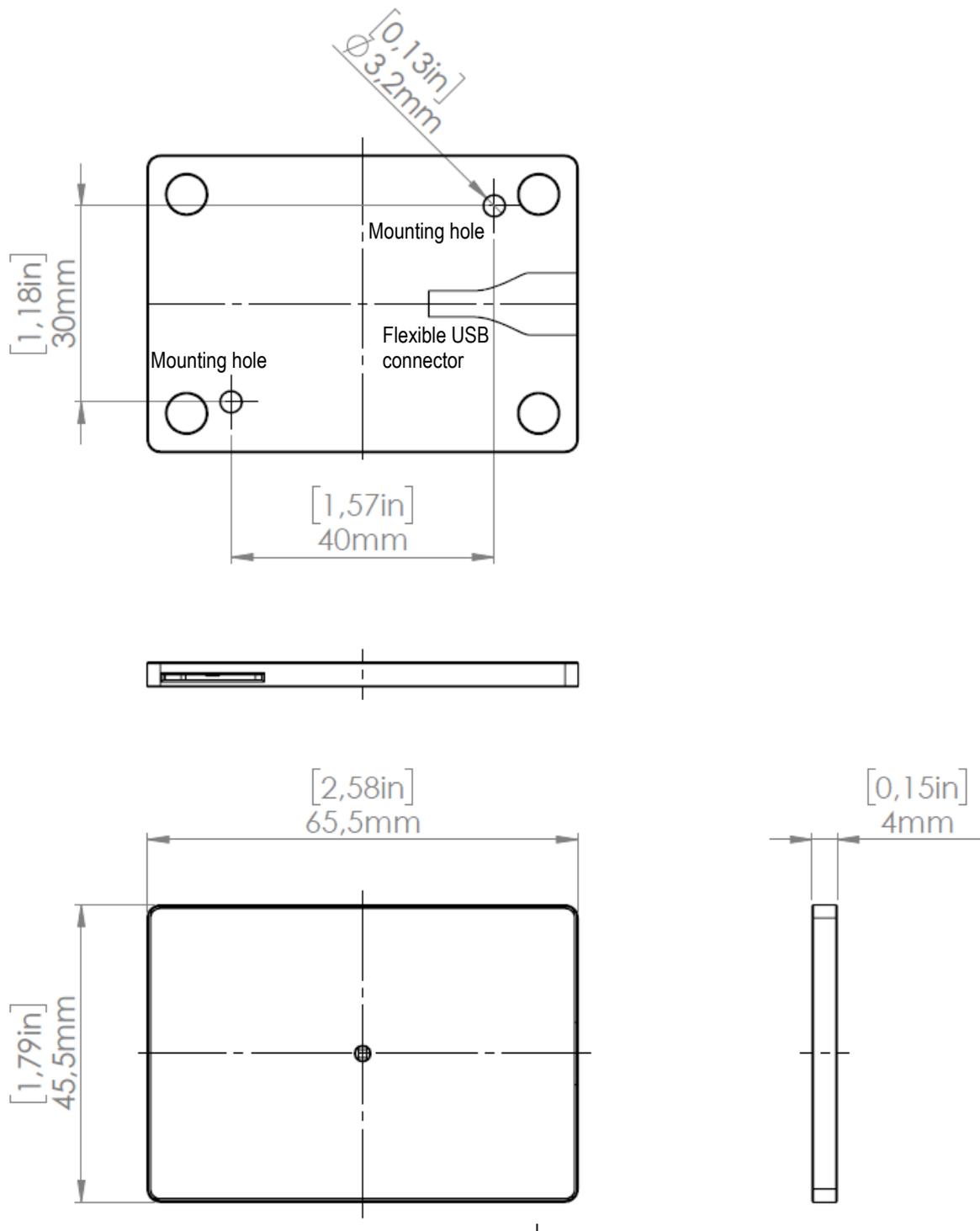


TECHNICAL DATA	
FREQUENCY	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
ANTENNAS	Integrated
HOUSING	ABS+PC blend, UL94-V0, color: black (core unit, clip adapter). Two 3.2 mm (0.13 inches) mounting holes for OEM integration (requires special inlay)
DIMENSIONS (L X W X H)	65.5 mm x 45.5 mm x 4.0 mm (2.6 inch x 1.8 inch x 0.16 inch)
POWER SUPPLY	4.3 V - 5.5 V via micro USB
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
TRANSMISSION SPEED	Host: USB Full speed (12 Mbit/s), HF Air: up to 848 kbit/s, BT Air: up to 100 kbit/s
OPERATING MODES (USB)	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01
BLUETOOTH LOW ENERGY	Bluetooth V4.2, 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	<p><b>ISO14443A:</b> LEGIC Advant<sup>1)</sup>, MIFARE Classic, MIFARE Classic EV1<sup>2)</sup>, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2<sup>2)</sup>, MIFARE DESFire Light<sup>6)</sup>, MIFARE Plus S, X, MIFARE Pro X<sup>3)</sup>, MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1, NTAG2xx, SLE44R35, SLE66Rxx (my-d move)<sup>4)</sup>, Topaz</p> <p><b>ISO14443B:</b> Calypso<sup>3)</sup>, Calypso Innovatron protocol<sup>3)</sup>, CEPAS<sup>3)</sup>, HID iCLASS<sup>1)</sup>, Moneo<sup>3)</sup>, PicoPass<sup>4)</sup>, SRI4K, SRIX4K, SRI512, SRT512</p> <p><b>ISO18092 ECMA-340:</b> NFC Forum Tag 1-5, NFC Peer-to-Peer, Sony FeliCa<sup>5)</sup>, NFC Active and passive communication mode</p> <p><b>ISO15693:</b> 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, MB89R118/119, SRF55Vxx (my-d vicinity)<sup>3)</sup>, Tag-it, PicoPass<sup>4)</sup></p>
SUPPORTED TRANSPONDERS (STANDARD) 125 kHz <sup>11)</sup>	AWID, Cardax, CASI-RUSCO, Deister <sup>6)</sup> , EM4100, 4102, 4200 <sup>7)</sup> , EM4050, 4150, 4450, 4550, EM4305 <sup>8)</sup> , HITAG 1 <sup>9)</sup> , HITAG 2 <sup>9)</sup> , HITAG S <sup>9)</sup> , ICT <sup>8)</sup> , IDTECK, Isonas, Keri, Miro, Nedap <sup>6)</sup> , Pyramid, Q5, T5557, T5567, T5577, TITAN (EM4050), UNIQUE, ZODIAC
SUPPORTED TRANSPONDERS (OPTION P)	All standard transponders, 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
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) <sup>10)</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>
PERIPHERAL INTERFACES	Female micro USB, flexible cable, use only with CAB-BS1 – CAB-BS7 shielded cables
CERTIFICATION NAME	TWN4 Slim
CERTIFICATION(S)	CE(REDE), REACH and RoHS-III compliant, FCC, IC, ACMA – pending
ORDER CODE(S)	<p><b>Standalone reader without cable</b></p> <p>T4QC-FC3B7      TWN4 Slim T4QC-FC3B7-P    TWN4 Slim Option P T4QC-FC3B7-PI   TWN4 Slim Option PI</p>
ACCESSORIES	<p>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)</p>

CABLES	CAB-BS1	Cable, TWN4 Slim, Mini USB male bent, 10cm (3,9 inches)
	CAB-BS2	Cable, TWN4 Slim, Mini USB female, 10cm (3,9 inches)
	CAB-BS3	Cable, TWN4 Slim, USB A male, 12cm (4,7 inches)
	CAB-BS4	Cable, TWN4 Slim, USB A male, 45cm (17,7 inches)
	CAB-BS5	Cable, TWN4 Slim, USB A male, 120cm (47,2 inches)
	CAB-BS6	Cable, TWN4 Slim, USB A male, 200cm (78,7 inches)
	CAB-BS7	Cable, TWN4 Slim, Mini USB male, 60cm (23,6 inches)
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.	

<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 <sup>10</sup>UID + PAC (Facility Code), r/w on request <sup>11</sup>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

DRAWING



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