

# TWN4 SLIM LEGIC FLAT AND COMPACT RFID READER/WRITER SUPPORTING LF, HF, NFC AND BLE





TWN4 Slim LEGIC - front view

TWN4 Slim LEGIC - rear view

TWN4 Slim LEGIC is ELATEC's smallest compact and flat RFID reader – it's smaller than an ID-1 card. TWN4 Slim LEGIC 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 LEGIC is perfectly suited to embed it into machines and devices, and especially MFP printers with optional clip-on snapin cover.

Special features:

- + Standalone operation and flush-mount integration into printers and other industrial applications
- + Equipped with LEGIC front-end chip SM-6300
- + 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 v5.0, 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 option available on request
- + Customizable design inlay
- + 3D construction data (STEP) available on request





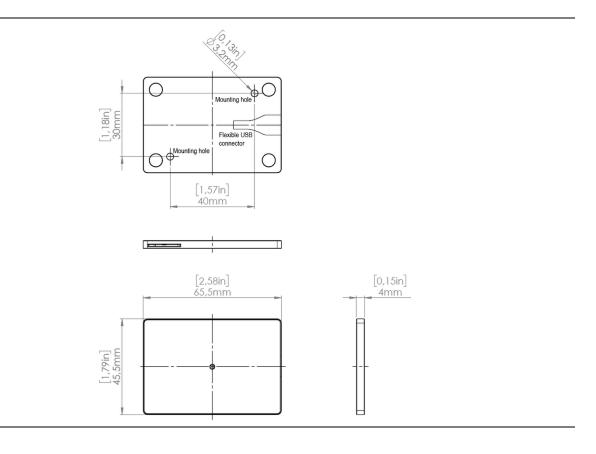
TECHNICAL DATA FREQUENCY	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)		
ANTENNA(S)	Integrated		
	ABS+PC blend, UL94-V0, color: black (core unit, clip adapter). Two 3.2 mm (0.13 inch)		
HOUSING	mounting holes for OEM integration (requires special inlay)		
DIMENSIONS (L X W X H)	65.5 mm x 45.5 mm x 4.0 mm / 2.6 inch x 1.8 inch x 0.16 inch		
	4.3 V - 5.5 V via micro USB		
POWER SUPPLY	Limited power source according to the safety norms listed in the respective declaration of		
	conformity, short-circuit current < 8 A		
CURRENT CONSUMPTION	Idle: 70 mA, RF field on: 135 mA typically (preliminary)		
	Operating: -20 °C up to +60 °C (-4 °F up to +140 °F)		
TEMPERATURE RANGE	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 v5.0, software upgradable; standards as GAP, SM, L2CAP, ATT; predefined		
BLUETOOTH LOW ENERGY	GATT structure; AES128 supported; LEGIC Connect on demand		
MTBF	500,000 hours		
WEIGHT	Approx. 18 g / 0.64 oz (without cable and holder)		
	ISO14443A:		
	LEGIC Advant, MIFARE Classic EV1 <sup>1</sup> , MIFARE Classic, MIFARE Mini, MIFARE		
	DESFire EV1, MIFARE DESFire EV2 <sup>2</sup> , MIFARE DESFire Light <sup>3</sup> , MIFARE Plus S, X,		
	MIFARE Pro X <sup>4</sup> ), MIFARE Smart MX <sup>4</sup> ), MIFARE Ultralight, MIFARE Ultralight C, MIFARE		
SUPPORTED TRANSPONDERS (STANDARD) 13.56 MHZ	Ultralight EV1 <sup>1</sup> , NTAG2xx, SLE44R35 <sup>4</sup> , SLE66Rxx (my-d move) <sup>4</sup>		
	ISO18092 ECMA-340:		
	NFC Forum Tag 1-5 <sup>5</sup> ), Sony FeliCa <sup>6</sup> ), NFC Active and passive communication mode ISO14443B:		
	Calypso <sup>4</sup> ), CEPAS <sup>4</sup> ), HID iCLASS <sup>7</sup> ), Moneo <sup>4</sup> ), Pico Pass <sup>7</sup> ) ISO15693:		
	EM4x33 <sup>4</sup> ), EM4x35 <sup>4</sup> ), HID iCLASS <sup>7</sup> ), HID iCLASS SE/SR <sup>7</sup> ), ICODE SLI, LEGIC Advant,		
	M24LR16/64, SRF55Vxx (my-d vicinity) <sup>4</sup> ), Tag-it, PicoPass <sup>7)</sup>		
	LEGIC Prime:		
	LEGIC Prime		
	AWID, Cardax, CASI-RUSCO, Deister <sup>9)</sup> , EM4100, 4102, 4200 <sup>10)</sup> , EM4050, 4150, 4450,		
SUPPORTED TRANSPONDERS (STANDARD) 125 KHZ <sup>8)</sup>	4550, EM4305 <sup>11</sup> ), FDX-B <sup>12</sup> ), EM4105 <sup>12</sup> ), UltraProx <sup>12</sup> ), HITAG 1 <sup>13</sup> ), HITAG 2 <sup>13</sup> ), HITAG S <sup>13</sup> )		
	ICT <sup>3</sup> ), IDTECK, Isonas, Keri, Miro, Nedap <sup>9</sup> , PAC <sup>3</sup> , Pyramid, Q5, T5557, T5567, T5577,		
	TIRIS/HDX <sup>12</sup> ), TITAN (EM4050), UNIQUE, ZODIAC		
SUPPORTED TRANSPONDERS	All Standard Transponders, Cotag, G-Prox <sup>9</sup> , HID DuoProx II, HID ISO Prox II, HID Micro		
(OPTION P)	Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch		
OS SUPPORT PERIPHERAL INTERFACES	Windows Embedded CE <sup>3</sup> , 7 (32-/64-bit), 8, 8.1, 10, Linux, Android <sup>3</sup> , iOS <sup>3</sup> , MAC OS X <sup>3</sup>		
	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		
CERTIFICATION NAME	TWN4 Slim LEGIC		
CERTIFICATION(S)	CE/RED, FCC, IC, REACH and RoHS-III compliant		
ORDER CODE(S)	Standalone reader without cable		
	T4QC-DC3B7 TWN4 Slim LEGIC		
	T4QC-DC3B7-P TWN4 Slim LEGIC, Option P		

<sup>1)</sup>r/w enhanced security features on request <sup>2</sup>/EV2/EV3 supported as part of the EV1 downward compatibility <sup>3</sup>/On request <sup>4</sup>/r/w in direct chip command mode <sup>5</sup>/NFC Forum Tag 1 not supported <sup>6</sup>/UID + r/w public area <sup>7</sup>/UID only <sup>8</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 <sup>9</sup>/Hash value only <sup>10</sup>/Only emulation of 4100, 4102 <sup>11</sup>/From FW V4.05 <sup>12</sup>/134.2 kHz only <sup>13</sup>/Without encryption



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 LEGIC reader, accessories and packaging		
	configuration (boxed or bulk packaging).		
	After the configuratio	n of the kit, customers receive their own article number.	

## DRAWING



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