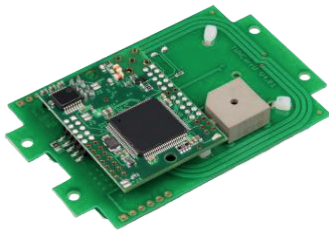
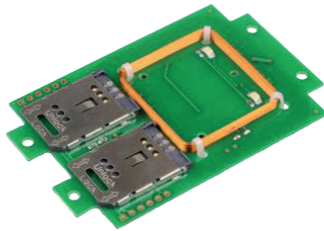


TWN4 LEGIC NFC 4500M

125kHz/134.2kHz & 13.56MHz Contactless Reader/Writer



TWN4 OEM PCB
Bottom View



TWN4 OEM PCB
Top View



Desktop Top View

Elatec's TWN4 Family allows users to read and write to almost any 125kHz/134.2kHz and 13.56MHz tags and/or labels. It supports all major transponders from various suppliers like ATMEL, EM, ST, MIFARE NXP, TI, HID, LEGIC, etc. and ISO standards like ISO14443A/B including layer 4 (T=CL), ISO15693, ISO18092 / ECMA-340 (NFC).

The new generation is a direct enhancement to the successful TWN3 family as it comes in the same mechanical dimensions (OEM PCB and Desktop Housing). Desktop supports host communication via USB or RS232.

Special Features:

- Segment initialization function
- High-level command library for cash / value handling, e.g. electronic purse
- Powerful SDK for writing Apps which are executed directly on the reader
- Infield Upgradeable
- Direct chip-commands support
- Two onboard SAM sockets (Secure Access Module)¹⁾
- CCID and PC/SC 2.01¹⁾
- Additional interfaces for OEM PCB version
 - I²C, SPI²⁾, Clock/Data³⁾, Wiegand³⁾, CAN²⁾³⁾
 - Dedicated expansion bus for connection of LCD, mass storage, etc.
 - 8 GPIOs

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Technical Data⁴⁾

Frequency	125kHz, 134.2kHz (LF) / 13.56MHz (HF)		
Housing	Material ABS UL94-V0, colour black or white		
Dimensions (L x W x H)	Desktop Reader: 88mm x 56mm x 18mm / 3.5inch x 2.2inch x 0.7inch OEM Board: 76mm x 49mm x 14mm / 3.0inch x 1.9inch x 0.6inch		
Power Supply	4.3V..5.5V via USB or RS232; RS232 requires 5V external power supply; via connector CNB 3.3V +/- 5%		
Current Consumption	RF field off: 20mA / Cyclic Operation: tbd ¹⁾ / Power down Mode: tbd ¹⁾ RF field on: 140mA typically		
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)		
Read- / Write Distance	Up to 100mm / 4inch (depending on transponder)		
HOST Interface	USB, RS232, serial 5V CMOS TTL, I ² C, SPI ²⁾ , Clock/Data ³⁾ , Wiegand ³⁾ , CAN ²⁾³⁾		
OS Support	Windows XP, Vista, 7 (32-/64-bit), 8, Linux		
Transmission Speed	Host : USB: Full speed (12Mbit) – RS232: up to 115.200baud	Air: up to 424kbit/s	
Modes of Operation	<ul style="list-style-type: none"> ▪ USB key board emulation – USB virtual COM port – Transparent (direct chip-commands support) ▪ CCID and PC/SC 2.01¹⁾ 		
Relative Humidity	5% to 95% non-condensing		
Supported Transponders	<p>Standard</p> <ul style="list-style-type: none"> ▪ 125kHz / 134.2kHz: 4100, 4102, 4200⁵⁾, AWID, CASI-RUSCO, HITAG 1⁶⁾, HITAG 2⁶⁾, HITAG S⁶⁾, Keri, Miro, Pyramid, TIRIS/HDX, UNIQUE, FDX-B, Q5, TITAN (4x50), T55x7, ZOODIAC Optionally, in consideration: 4305, Cardax, IDTECK, ▪ 13.56MHz / LEGIC Advant ▪ 13.56MHz / LEGIC Prime ▪ 13.56MHz / ISO14443 A+B: compatible to part 4, MIFARE DESFire, MIFARE Plus⁷⁾, MIFARE SmartMX⁷⁾, my-d move⁷⁾, PayPass⁷⁾, MIFARE Classic¹⁾, MIFARE Ultralight, MIFARE Ultralight C ▪ 13.56MHz / ISO15693: EM4035⁷⁾, Tag-it, my-d vicinity⁷⁾, ICODE SLI, M24LR16/64, PicoPass⁷⁾, HID iCLASS⁵⁾ ▪ 13.56MHz / ISO18092 / NFC: NFCIP-1: NFC Forum Tag Type 2-4, Sony FeliCa⁶⁾ <p>Version P</p> <p>Standard + Cotag, G-Prox⁸⁾, HID Prox, Honeywell NexWatch, Indala, ioProx</p>		
Certifications	CE, R&TTE, RoHS-II compliant, FCC ²⁾		
MTBF	500.000 hours		
Weight	Approx. 20 g (without housing)		
Order Code	Standard	Version P	
OEM Board	ART15289	ART15421	
USB black / white	ART15345 / ART15346	ART15349 / ART15350	
RS232 black / white	ART15347 / ART15348	ART15418 / ART15419	

¹⁾In Preparation ²⁾On Request Only ³⁾External Interface Required ⁴⁾Target Specification ⁵⁾UID Only ⁶⁾Encryption Not Supported ⁷⁾UID/PUPI Only, Read/Write On Request ⁸⁾Hash Value Only

Accessories

Order Code	Snap-in holder ART13512 black, ART15344 white		Bracket Holder ART15203 black, ART15235 white		ART11493 USB cable 200cm/78.74inch ART13488 USB cable 45cm/17.72inch ART13829 USB cable 120cm/47.24inch
Order Code	ART14712 Power Supply (EU) ART14714 Power Supply (AU)		ART14713 Power Supply (US) ART14715 Power Supply (UK)		ART14269 USB cable mini 12cm/4.72inch ART12240 RS232 cable 200cm/78.74inch

Drawing/Pin Out

Refer to document DS_TWN4 Reader Family Pinouts

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