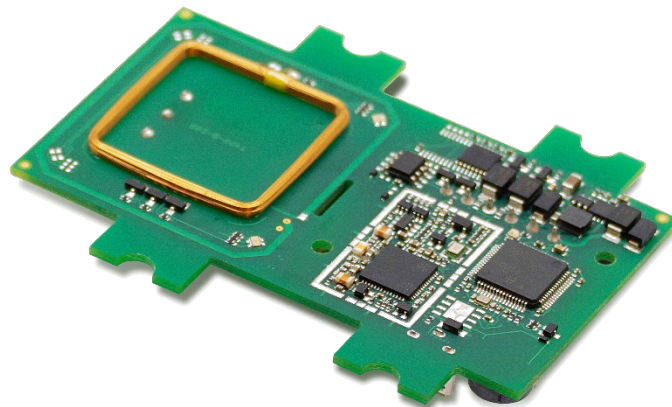


# TWN4 Palon One LEGIC M LF HF

125 kHz / 13.56 MHz contactless RFID module with NFC support



TWN4 Palon One LEGIC M LF HF is designed as a versatile OEM module for integration into third-party products and devices. It supports enhanced interfaces. The new PCB board inherits all advantages and integrated tool support of the ELATEC TWN4 family.

TWN4 Palon One LEGIC M LF HF is a multi-technology reader/writer supporting almost all 125 kHz and 13.56 MHz contactless technologies, including NFC. On-board antennas for HF and LF allow excellent contactless performance.

## Special features:

- + Optimized PCB design for OEM integration
- + On-board LF and HF antennas
- + One on-board SAM socket (Secure Access Module)
- + Interfaces: RS-485, Clock/Data, Wiegand, USB, OSDP protocol optionally
- + Supports quick (re)configuration over network and over wireless interface with TWN4 CONFIG Card
- + Supports transparent data exchange with RFID media
- + Firmware update in the field possible
- + 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



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

FREQUENCIES	125 kHz (LF) / 13.56 MHz (HF)
ANTENNAS	Integrated
DIMENSIONS (L X W X H)	Approx. 83.00 x 62.00 x 14.00 mm / 3.27 x 2.44 x 0.55 inch
POWER	Micro USB: 4.3 V - 5.5 V Connector X2: 9.0 V - 30 V PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
CURRENT CONSUMPTION	Idle: 50 mA @12 V; operating: typically 130 mA @12 V
TEMPERATURE RANGE	Operating: -25 °C up to +80 °C (-13 °F up to +176 °F) Storage: -40 °C up to +85 °C (-40 °F up to +185 °F)
RELATIVE HUMIDITY	5% to 95% non-condensing
READ- / WRITE DISTANCE	LF and HF: up to 100 mm / 4 inch, depending on OEM environment and transponder
OPERATING MODES (USB)	USB keyboard emulation – USB virtual COM port – CCID / PC/SC 2.01
MTBF	500,000 hours
WEIGHT	Approx. 25 g / 0.88 oz
COMPATIBLE PIN HEADER	Plug-in connection terminal block, 6 pins, screw fastening of wires
SABOTAGE DETECTION	Micro Tamper Switch
SIGNALING	2 RGB LEDs, individually programmable Buzzer
SUPPORTED OPTIONS AND TRANSPONDERS	Depending on the firmware version and installed options, ELATEC readers and modules can support a wide range of RFID technologies. Please refer to the relevant ELATEC transponder matrix (available at <a href="http://www.elatec-rfid.com/int/transponder-technology">www.elatec-rfid.com/int/transponder-technology</a> ) for more information about the available options and RFID technologies supported by the product.
OS SUPPORT	Windows 7 (32-/64-bit) and higher versions, Linux, Android <sup>1)</sup> , iOS <sup>1)</sup> , MAC OS X <sup>1)</sup>
PERIPHERAL INTERFACES	Micro USB, RS-485, OSDP <sup>1)</sup> , RS-232 (RX/TX) <sup>1)</sup> , Output 5V: Wiegand (D0/D1), or Clock/Data, 1 SAM slot for ID-000 card format
TRANSMISSION SPEED	USB full speed (12 Mbit/s), RS-485: up to 38,400 baud
CERTIFICATION NAME	TWN4 Palon One LEGIC M LF HF
CERTIFICATIONS	Non-exhaustive list <sup>2)</sup> : CE/RED, REACH and RoHS-III compliant
ORDER CODES	T4W1-B1B16                      Standard reader module T4W1-B1B16-P                    Reader module with P option

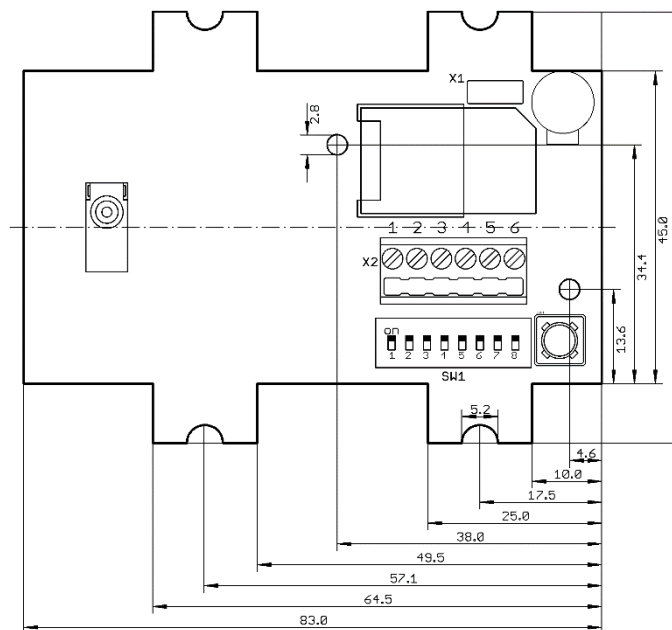
<sup>1)</sup>On request

<sup>2)</sup>The product has been certified for use in many countries and regions. Contact your Sales representative for detailed information about all certifications and approvals granted to the product.

## DRAWING / CONNECTOR ASSIGNMENT

PIN	ASSIGNMENT
1	RS-485 A
2	RS-485 B
3	Wiegand D0 or DATA
4	Wiegand D1 or CLOCK
5	GND
6	VIN 9 – 30 Volt

DIP	ASSIGNMENT
1	RS-485 address 0 LSB
2	RS-485 address 1
3	RS-485 address 2
4	RS-485 address 3
5	RS-485 BIAS on/off
6	RS-485 speed 0
7	RS-485 speed 1
8	RS-485 Termination 120 Ohm



Drawing  
(All measures in mm)

Firmware may change the assignment of the DIP switch. Please refer to the TWN4 Palon manual.  
For Wiegand, Clock/Data the DIP switches are not in use.

**ELATEC GmbH**  
Zeppelinstr. 1  
82178 Puchheim  
Germany  
P +49 89 552 9961 0  
F +49 89 552 9961 129  
E-Mail: info-rfid@elatec.com  
Website: elatec.com

**ELATEC Systems GmbH**  
Schwieberdinger Str. 44  
71636 Ludwigsburg  
Germany  
P +49 7141 309736 0  
E-Mail: info-rfid@elatec.com  
Website: elatec.com

**ELATEC Inc.**  
1995 SW Martin Hwy  
Palm City • FL 34990  
USA  
P +1 772 210 2263  
F +1 772 382 3749  
E-Mail: americas-info@elatec.com  
Website: elatec.com

**ELATEC Technology (Shenzhen) LLC**  
918, Main Building, Tian An Cyber Times  
Tower, No. 6, Tairan Fourth Road, Tian 'an  
Community, Shatou Neighborhood  
Futian District • Shenzhen • China  
P/F +86 755 2394 6014  
E-Mail: apac-info@elatec.com  
Website: elatec.com

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