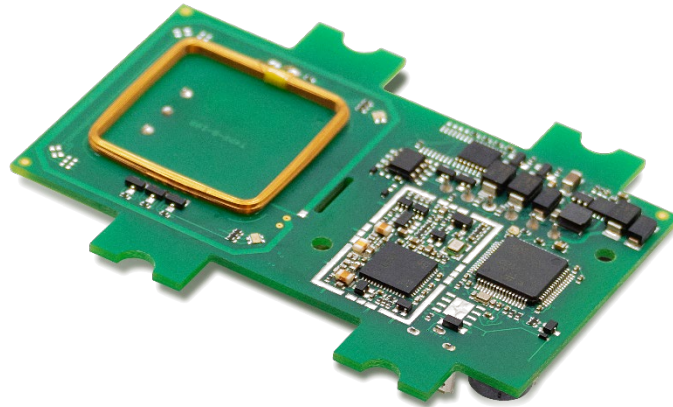# TWN4 Palon One LEGIC M LF HF

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

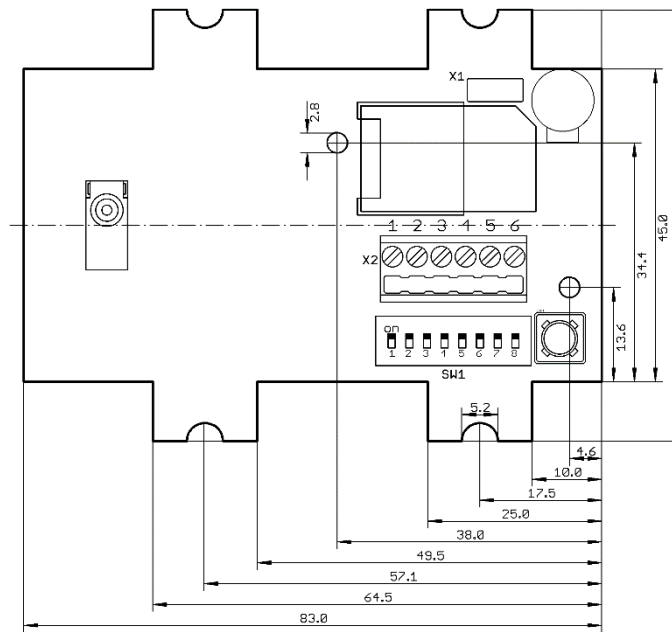|	
FREQUENCIES	125 kHz (LF) / 13.56 MHz (HF)
ANTENNAS	Integrated
DIMENSIONS (L X W X H)	Approx. 83.00 x 62.00 x 14.00 mm / 3.27 x 2.44 x 0.55 inch
POWER	Micro USB: 4.3 V - 5.5 V Connector X2: 9.0 V - 30 V ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 8 A
CURRENT CONSUMPTION	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 www.elatec-rfid.com/int/transponder-technology) 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[1], iOS[1], MAC OS X[1]
PERIPHERAL INTERFACES	Micro USB, RS-485, OSDP[1], RS-232 (RX/TX)[1], 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[2]: CE/RED, REACH and RoHS-III compliant
ORDER CODES	T4W1-B1B16 Standard reader module T4W1-B1B16-P Reader module with P option

[1]On request

[2]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.