

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

































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 |
| 110 | |

¹¹On request

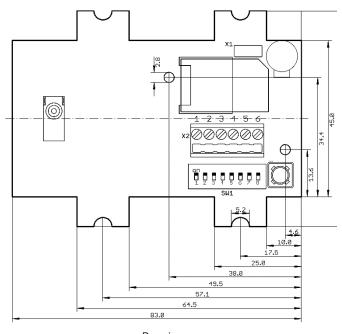
²The product has been certified for use in many countries and regions. Contact your Sales representative for detailed information about all certifications and approvals granted to the product.



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.

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