TWN4 PALON COMPACT LEGIC PANEL LIGHT

RFID READER/WRITER SUPPORTING LF, HF AND NFC FOR PANEL MOUNT

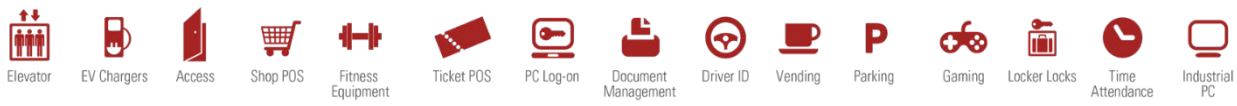
(exemplary illustration)

TWN4 Palon Compact LEGIC Panel Light is a versatile panel mount reader for integration into third-party products and devices. It supports enhanced interfaces, especially RS-485, and inherits all advantages and integrated tool support of the ELATEC TWN4 family. The IP65 protected housing is easy to install.

TWN4 Palon Compact LEGIC Panel Light is a multi-technology reader/writer family supporting almost all 125 kHz and 13.56 MHz contactless technologies, including NFC. Integrated antennas for HF and LF allow excellent contactless performance.

Special features:

+ Optimized housing design for easy, fast and secure installation
+ Integrated LF and HF antennas
+ One on-board SAM socket (Secure Access Module)
+ Interfaces: RS-485, Wiegand or Clock/Data. OSDP protocol optionally, USB
+ Supports quick (re)configuration over network and over wireless interface with TWN4 CONFIG Card
+ Direct chip-commands support
+ 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
+ TWN4 Upgrade Card for P option available on request
+ 3D construction data (STEP) available on request



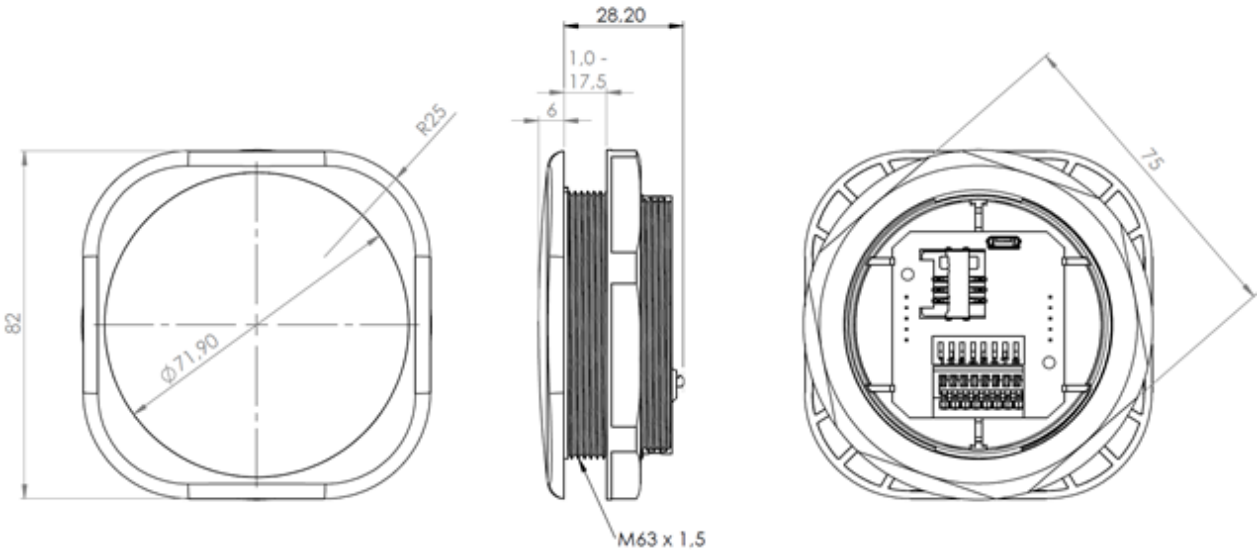
TECHNICAL DATA

FREQUENCY	125 kHz (LF) / 13.56 MHz (HF)
ANTENNA(S)	Integrated
HOUSING	Transparent Polycarbonate (PC) housing, black PC outer mounting ring. TWN4 Palon Compact LEGIC M Light reader module pre-installed. ABS locknut M63 x 1.5, black or grey, pre-installed design inlay (customizable). For mounting hole diameter 63.2 mm with anti-twist protection
DIMENSIONS (L X W X H)	82 mm x 82 mm x 34.2 mm / 3.23 inch x 3.23 inch x 1.35 inch
POWER	9.0 V - 30 V via connector X1; 4.3 V - 5.5 V via micro USB Limited power source according to the safety norms listed in the respective declaration of conformity, short-circuit current < 8 A
CURRENT CONSUMPTION	Operating: typ. 160 mA @12 V; Idle: typ. 50 mA @12 V; Peak typ. 250 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	IP65 protected housing (frontside, when mounted) 5% to 95% non-condensing (inner electronic components)
READ- / WRITE DISTANCE	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 (electronic components)
WEIGHT	Approx. 77 g / 2.72 oz
SABOTAGE DETECTION	Infrared tamper detector, front facing
WIRE CONNECTOR	PCB terminal block, 8 positions, push-in spring connection for wires 0.2 to 0.5 mm² / AWG 24 to 20, tool-free cable wiring
DIP SWITCH	8 position DIP switch for RS-485: addressing, speed settings, line termination
SIGNALING	Center RGB LED; acoustic loudspeaker
SUPPORTED TRANSPONDERS (STANDARD) 13.56 MHZ	ISO14443A: LEGIC Advant, MIFARE Classic EV1[1], MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2[2], MIFARE DESFire Light[3], MIFARE Plus S, X, MIFARE Pro X[4], MIFARE Smart MX[4], MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1[1], NTAG2xx, SLE44R35[4], SLE66Rxx (my-d move)[4] ISO18092 ECMA-340: NFC Forum Tag 1-5[5], Sony FeliCa[6], NFC Active and passive communication mode, Passive peer-to-peer mode - initiator, NFC Tag 2, 3, 4 ISO14443B: Calypso[4], CEPAS[4], HID iCLASS[7], Moneo[4], Pico Pass[7] ISO15693: EM4x33[4], EM4x35[4], HID iCLASS[7], HID iCLASS SE/SR[7], ICODE SLI, LEGIC Advant, M24LR16/64, SRF55Vxx (my-d vicinity)[4], Tag-it, PicoPass[7] LEGIC Prime: LEGIC Prime
SUPPORTED TRANSPONDERS (STANDARD) 125 KHZ[8]	AWID, Cardax, CASI-RUSCO, Deister[9], EM4100, 4102, 4200[10], EM4050, 4150, 4450, 4550, EM4305[11], FDX-B[12], EM4105[12], UltraProx[12], HITAG 1[13], HITAG 2[13], HITAG S[13], ICT[3], IDTECK, Isonas, Keri, Miro, Nedap[9], PAC[3], Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX[12], TITAN (EM4050), UNIQUE, ZODIAC
SUPPORTED TRANSPONDERS (OPTION P)	All Standard Transponders, Cotag, G-Prox[9], HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch
OS SUPPORT	Windows Embedded CE[3], 7 (32-/64-bit), 8, 8.1, 10, Linux, Android[3], iOS[3], MAC OS X[3]
PERIPHERAL INTERFACES	USB, RS-485, OSDP[3], Output 5V: Wiegand (D0/D1), or Clock/Data
TRANSMISSION SPEED	HF Air: up to 848 kbit/s, USB Full speed (12 Mbit/s), RS-485: up to 38,400 baud
EXTENSION SLOT	One SAM socket for ID-000 cards or modules
CERTIFICATION NAME	TWN4 Palon Compact LEGIC M Light

CERTIFICATION(S)	CE/RED, FCC, IC, REACH and RoHS-III compliant, and many more	
ORDER CODE(S)	**Box kit:** TWN4 Palon Compact LEGIC M Light reader module in transparent housing, black outer mounting ring, locknut, O ring seal, standard inlay, installation instruction, cardboard box	
	T4PK-B02TR6	TWN4 Palon Compact LEGIC Panel Light kit, as described
	T4PK-B02TR6-P	same, option P
PACKAGE CONTENTS	HOPL-YR01TR	Palon Panel transparent housing with black design frame
	MECH-LNB01	Locknut
	MECH-ORB01	O-ring seal
	CAB-B9	USB A / USB micro cable

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

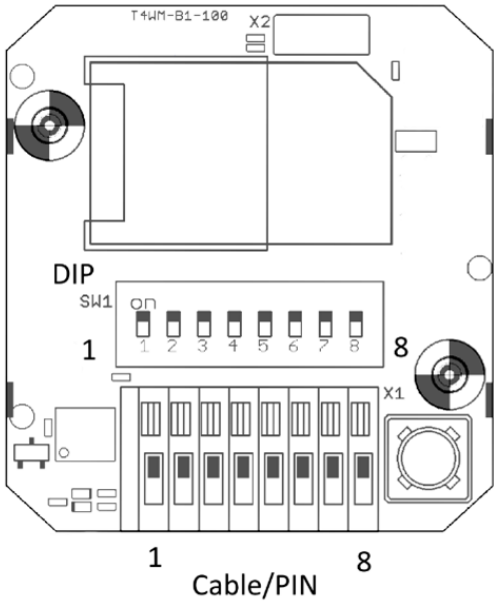
DRAWING / CONNECTOR ASSIGNMENT



(All measures in mm)

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

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



Drawing / rear view PCB

Firmware may change the assignment of the DIP switch. Please refer to the TWN4 Palon manual.
For Wiegand, Clock/Data the DIP switch is not used.

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