

K531-TTL

OEM CONTACTLESS MODULE READER/WRITER WITH ANTENNA TTL



Ready-to-use ISO/IEC 14443-A/B reader / writer with antenna RX/TX at TTL level that can be embedded in virtually any kind of appliance

KEY FEATURES

K531-TTL is dedicated to integrators who need to work with any ISO 14443-A/B cards such as Mifare, DESFire, Calypso and more.

Thanks to its asynchronous serial communication interface, K531-TTL is really easy to operate from any microcontroller or host computer.

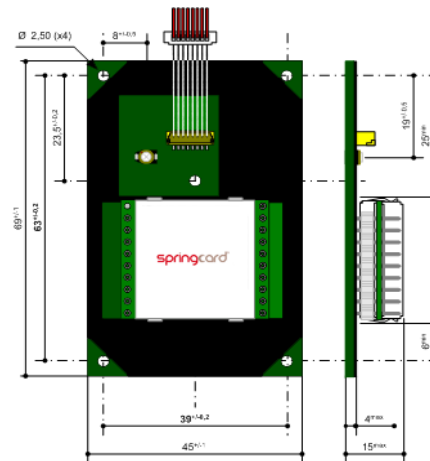
K531-TTL has many features that make it the only product on the market to provide such flexibility at low cost.

- Metallic bonnets to protect from radiations
- Ferrite on antenna to protect other components from radiations
- Embedded T=CL protocol, ISO/IEC 14443 A & B
- compliance from layer 1 to 4. Able to read/write all files/sectors of Mifare, DESFire,...
- High level function set
- High speed communication

A FEW TYPICAL APPLICATIONS

- vending machine,
- card printer,
- access control gate
- enrollement station,
- And more

DETAILED VIEWS



Pinout
(fem. connector : JST SHR-08V-S-B)

| | | | |
|--------|---|---|-------------|
| EN | 8 | 4 | VCC (5V) |
| NMI | 7 | 3 | RXD (0/+5V) |
| Ground | 6 | 2 | TXD (0/+5V) |
| RESET | 5 | 1 | Ground |



SPRINGCARD & PRO ACTIVE

Established in 2000, Pro Active is an innovative provider of smartcard-related solutions, and one of the leaders on the contactless-reader market.

SpringCard distributes Pro Active's contact and contactless products worldwide, under a single brand name.

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K531-TTL

OEM CONTACTLESS MODULE READER/WRITER WITH ANTENNA TTL



TECHNICAL SPECIFICATIONS

Contactless smartcard interface

| | |
|---|--|
| Standards | ISO/IEC 14443 A and B, T=CL |
| RFID carrier | 13.56 MHz |
| Operating distance | typical 5 cm - up to 8cm depending on card and antenna |
| Card baud rate | 106, 212 or 424 kbit/s |
| Supported cards (partial list): NXP (Philips) MIFARE Classic & UltraLight NXP (Philips) DESFIRE, SmartMX, ProX Infineon SLE66 family ST MicroElectronics SR, SRI, SRIX families ASK CTS256/CTS512 Calypso (CD97, CD21, GTML, etc) And virtually any ISO 14443 A or B compliant smartcard | |

Serial Interface

| | |
|-----------------------|---|
| RX/TX pins (CMOS/TTL) | asynchronous serial communication 8 data bits, 1 stop, no flow control 9600, 38400 or 115200bps |
| Power supply | 5 V DC |
| Consumption | 150mA typical |

Hardware specifications

| | |
|--------------------|---|
| Dimensions (LxWxH) | 45 x 69 x 15 mm |
| Weight | ≈ 14g |
| Housing | Metallic bonnets on K531 Ferrite shield on antenna |

Environment and safety

| | |
|-----------------------|--|
| Operating temperature | -20 → +80°C |
| Storage temperature | -40 → +85°C |
| MTBF | 500 000 hours |
| CE mark | EN50082 / EN55022 class B ¹ |
| FCC | Part 15 |
| Other standards | RoHS |

¹Safety: EN60950: 2001 ; EN 50364 : 2001, EMCEN 301 489-03 v1.4.1 ; EN 301 489-01 v1.6.1

ORDER CODES

| PART # | Description |
|----------|---|
| K531-TTL | ISO 14443-A/B OEM module with TTL antenna |

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