springcard®

RDR-TTL

OEM RFID SCANNER - MODULE WITH ANTENNA AND **RS-TTL** INTERFACE

ISO/IEC 14443-A/B and ISO/IEC 15693 reader with antenna and RX/TX at TTL level that can be embedded in virtually any kind of appliance

KEY FEATURES

RDR-TTL is a standalone reader and perfoms all the job on its own. There is no need to develop any software. Collected data are then transmitted to the computer in a serial communication stream.

Thanks to the RDR-TTL, reading RFID chips is as easy as reading a barcode.

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

- Metallic bonnets providing optimal CEM characteristics and noise immunity
- Ferrite-shielded antenna improves operation even near metal or other PCBs
- Embedded T=CL protocol, ISO/IEC 14443-A/B (from layer 1 to 4) and ISO/IEC 15693 compliance. Able to read all files/sectors of Mifare, DESFire,...
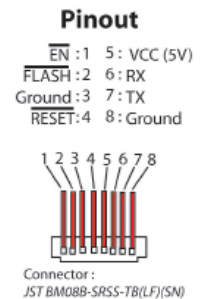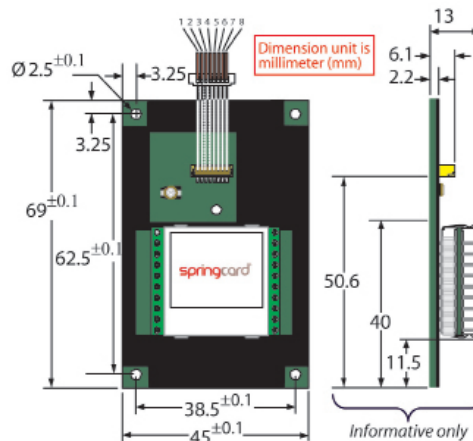
EASY CONFIGURATION

RDR-TTL is fully configured through a secure master card. The scanner is able to run 4 recognition templates simultaneously.

A FEW TYPICAL APPLICATIONS

- Loyalty program, user identification and asset tracking,
- Access Control,
- Logistics and RFID asset management

DETAILED VIEWS

Pinout

$\overline{EN}$: 1 5 : VCC (5V)
$\overline{FLASH}$: 2 6 : RX
Ground : 3 7 : TX
$\overline{RESET}$: 4 8 : Ground

Connector : JST BM08B-SRSS-TB(LF)(SN)

	PIN Assignements	Notes
1	/EN - Not used	Must be left unconnected
2	/FLASH - 5V : normal operation 0V : firmware upgrade	Can be left unconnected
3	Ground	
4	/RESET - 5V : normal operation 0V : module reset	Can be left unconntected
5	VCC (5V)	
6	RX (TTL)	Host to module
7	TX (TTL)	Module to host
8	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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TECHNICAL SPECIFICATIONS

K632 Contactless smartcard interface	
Standards	ISO/IEC 14443 A and B, T=CL ISO/IEC 15693 and 18000-3
RFID carrier	13.56 MHz
Operating distance	typical 5 cm - up to 8cm depending on card and antenna
Card baud rate	106, 212, 424 or 848 kbit/s depending on antenna

Supported cards (partial list) :
- NXP (Philips) ICODE1, ICODE-SLI, etc
- Texas Instrument TagIT
- NXP (Philips) MIFARE Classic & UltraLight
- NXP (Philips) DESFIRE, SmartMX, ProX
- Infineon SLE66 family
- ST MicroElectronics SR, SRI, SRIX families
- HID iClass, Inside PicoTag
- ASK CTS256/CTS512
- Calypso (CD97, CD21, GTML, etc)

And virtually any ISO/IEC 14443 A or B compliant smartcard, or ISO/IEC 15693 compliant RFID label

Hardware specifications	
Dimensions (LxWxH)	45 x 69 x 15 mm
Weight	≈ 14g
Housing	Metalic bonnets on K632 Ferrite shield on antenna
Connector	JST: BM08B-SRSS-TB(LF)(SN) Corresponding female connector (*not provided*) : JST: SHR-08V -S -B

Environment and safety	
Operating temperature	-20→+70℃
Storage temperature	-40 →+85℃
MTBF	500 000 hours
CE mark	EN50082 / EN55022 class B[*]
FCC	Part 15
Other standards	RoHS

[*]Safety: EN60950: 2001 ; EN 50364 : 2001, EMC:EN 301 489-03 v1.4.1 ; EN 301 489-01 v1.6.1.

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	200mA typical
Connector	JST: BM08B-SRSS-TB(LF)(SN) Corresponding female connector (*not provided*) : JST: SHR-08V -S -B

ORDER CODES

PART #	Description
RDR-TTL	ISO 14443-A/B and ISO 15693 OEM RFID scanner module with antenna and TTL interface

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