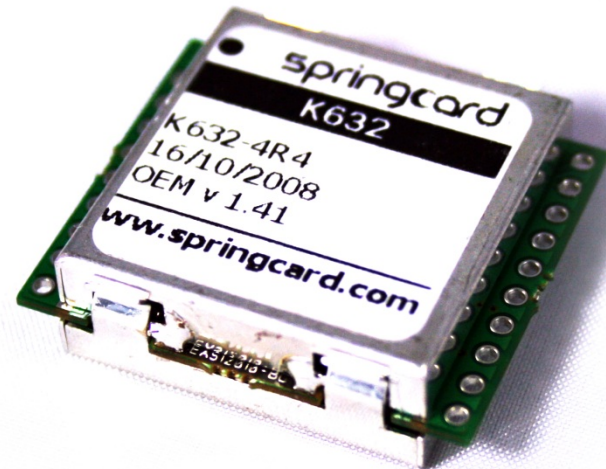


K632 Family

Presentation of a versatile OEM
and its versions



Agenda

- **Product overview**
- **K632**
- **K632 with Antenna**
- **K632 RDR**
- **Conclusion**

K632 Family

Compliant with

- ISO 14443
- ISO 15693
- ISO/IEC 18000-3

K632 is an OEM
**Contactless 13.56 MHz Reader and/or
Writer**

Three versions are available :

K632
K632 with Antenna
RDR

Low cost

- Affordable
- Quick and easy implementation
- Robust (wide temperature range)



Product scope

K632 (all versions) :

- Is a **contactless smartcard reader/writer** (13.56MHz range)
- **T=CL** protocol embedded in coupler's firmware (256-byte frames)
- Handles **any ISO 14443 (type A, B and B')** and **ISO 15693** compliant smartcards or tags
- Compliant with **NFC objects** or **mobile phones** in 14443 card emulation mode (standards ISO/IEC 18092 and 23917).

Supported contactless cards

NXP (formerly *Philips Semiconductors*): **Mifare Classic & UltraLight, Desfire, ProX, SmartMX**
Infineon SLE66 family
ST MicroElectronics SR, SRI, SRIX families
ASK CTS256/CTS512
Calypso (CD97, CD21, GTML...)
And virtually any ISO/IEC 14443 A or B compliant smartcard

Supported RFID tags and

NXP ICODE1, ICODE-SLI
Texas Instrument TagIT
STMicroelectronics LRI
AND MORE

K632

- The module on its own
- **Small size** : 26x31x09mm
- **Metallic bonnets** to protect from radiations
- Develop your application using our **SpringProxApi**
- To be used **with your own antenna**



Typical applications

- ticketing, transportation, road toll pricing
- RFID tracking, loyalty
- private money payment, corporate id card, citizen card
- physical access control
- and more...

K632 with Antenna

Same features, but **with antenna provided**;
ferrite on antenna to protect other components
from radiations

Size : 45x69x15mm

Connect with JST connector ref: **SHR-08V -S -B**

Available serial interfaces

- TTL
- 232
- 485 (recommended for long distance operations)



Typical applications

- vending machine
- card printer
- access control gate
- enrollment station
- And more...

K632 & K632 with Antenna : how does it work?

- Unified **SpringProx API**, available in the free developer's kit (SDK for K531 and K632) ; the SDK includes ANSI C source code, to be ported on virtually any target, and Windows binaries
- Same platform as **Legacy Family**, thus allowing fast and easy prototyping on a desktop computer
- Lightweight ASCII protocol and simple command set for instant operation from inexpensive host microcontroller.

K632 RDR

Stand alone version of the K632

- Contactless **reader device emulating keyboard entries** : displays instantaneously smartcard serial numbers on any text editor!
- **ZERO installation** : completely autonomous!!!
Configuration of the product via Master cards
Up to 4 templates : managing 4 types of cards differently

Specifications of the RDR

antenna provided; ferrite on antenna to protect other components from radiations

Size : 45x69x15mm

Connect with JST connector ref: **SHR-08V -S -B**

Available serial interfaces

- TTL
- 232



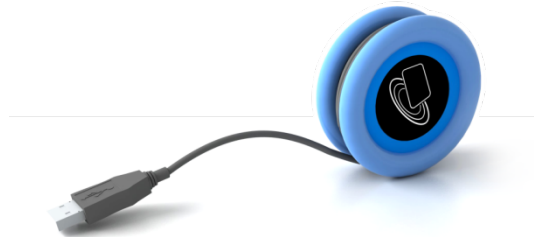
Typical applications

- Fast user identification and tracking
- Loyalty, leisure or exhibition centers
- RFID asset tracking, logistics
- RFID asset managements : books, medicines or other valuables.
- and more...

K632 RDR : how does it work?

Desktop equivalent is the Prox'N'Roll RFID Scanner

Demo time : using the Prox'N'Roll and a simple notepad



Conclusion : versions summary

Version	Development and integration	Interface	Order code
K632	SpringProxApi		K632-2R4
K632 with Antenna	SpringProxApi	TTL 232 485	K632-TTL K632-232 K632-485
K632 RDR	StandAlone, configuration via Master cards	TTL 232 485	RDR-TTL RDR-232 RDR-485

Custom firmware available on demand

Contact us

SpringCard

HEADQUARTERS, EUROPE

13 voie la Cardon
Parc Gutenberg
91120 Palaiseau
France

Phone : +33 (0) 164 53 20 10
Fax : +33 (0) 164 53 20 18

SpringCard

AMERICAS

6161 El Cajon Blvd, Suite B,
PMB 437
San Diego, CA 92115
USA

Phone : + 1 (713) 261-6746



DISCLAIMER

This document is provided for informational purposes only and shall not be construed as a commercial offer, a license, an advisory, fiduciary or professional relationship between Pro-Active and you. No information provided in this document shall be considered a substitute for your independent investigation. The information provided in document may be related to products or services that are not available in your country. This document is provided "as is" and without warranty of any kind to the extent allowed by the applicable law. While PRO ACTIVE will use reasonable efforts to provide reliable information, we don't warrant that this document is free of inaccuracies, errors and/or omissions, or that its content is appropriate for your particular use or up to date. PRO ACTIVE reserves the right to change the information at any time without notice. PRO ACTIVE does not warrant any results derived from the use of the products described in this document. PRO ACTIVE will not be liable for any indirect, consequential or incidental damages, including but not limited to lost profits or revenues, business interruption, loss of data arising out of or in connection with the use, inability to use or reliance on any product (either hardware or software) described in this document. These products are not designed for use in life support appliances, devices, or systems where malfunction of these product may result in personal injury. PRO ACTIVE customers using or selling these products for use in such applications do so on their own risk and agree to fully indemnify PRO ACTIVE for any damages resulting from such improper use or sale.

COPYRIGHT NOTICE

SPRINGCARD, the SPRINGCARD logo, PRO ACTIVE and the PRO ACTIVE logo are registered trademarks of PRO ACTIVE SAS.

All other trademarks are property of their respective owners.

Information in this document is subject to change without notice. Reproduction without written permission of PRO ACTIVE is forbidden.

All information in this document is either public information or is the intellectual property of PRO ACTIVE and/or its suppliers or partners. You are free to view and print this document for your own use only. Those rights granted to you constitute a license and not a transfer of title : you may not remove this copyright notice nor the proprietary notices contained in this documents, and you are not allowed to publish or reproduce this document, either on the web or by any mean, without written permission of PRO ACTIVE.

Copyright © PRO ACTIVE SAS 2008, all rights reserved.

EDITOR'S INFORMATION

Published by **PRO ACTIVE SAS** company with a capital of 227 000 €
RCS EVRY B 429 665 482
NAF 722C
VAT# : FR 27 429 665 482