

## PROX'N'ROLL

### USB PC/SC CONTACTLESS SMARTCARD READER

SpringCard Prox'N'Roll is a versatile 13.56MHz contactless reader and encoder for PC.

With an attractive look and a fast USB interface, Prox'N'Roll is robust and affordable, ideal for high volume deployments.



#### KEY FEATURES

Contactless smartcards, NFC tags and RFID labels are increasingly present in today's end user daily activities, and not limited to corporate offices.

Along with its attractive look & feel and its USB interface for fast data transfer, Prox'N'Roll is robust and adapts to a variety of situations.

A high performance technology: **Prox'N'Roll** supports USB 2.0 full speed (12Mbps), and fastest smartcard baud rate (up to 848kbps).

#### PC/SC INTERFACE

**Prox'N'Roll** PC/SC is supported by major operating systems through standard drivers. This standardized smartcard reader API allows developers to work with contactless cards (including Mifare and other wired-logic chips) as easily as if they were classical T=0 or T=1 contact cards.

#### A FEW TYPICAL APPLICATIONS

- Loyalty programs,
- Micro-payment,
- Card issuing desk,
- User identification,
- And more

#### SUPPORTED CONTACTLESS SMARTCARDS

**Prox'N'Roll** is compliant with ISO/IEC 15693 and 14443 (A and B) standards. List of supported chips includes:

- NXP (Philips) : ICODE1, ICODE-SLI, Mifare Classic and UltraLight, Desfire, ProX, SmartMX,
- Texas Instrument : TagIT,
- ST MicroElectronics : SR176, SRiX, etc
- ASK CTS256B and CTS512B,
- HID iClass and Inside PicoTag,
- MultOS or JavaCard T=CL cards,
- Calypso transport cards,
- NFC tags type 1, 2 and 4,
- NFC mobile phones or other NFC-capable objects (working in card emulation mode)

**Prox'N'Roll** Lite is a cost-effective version that supports ISO/IEC 14443 only.

#### SPRINGCARD & PRO ACTIVE

Established in 2000, **Pro Active** SAS is an innovative provider of contact/contactless smartcard reader/writer/encoder, and a leader on the contactless-reader market.

All **Pro Active** products are distributed worldwide under the **Springcard** brand name.

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A PRO ACTIVE BRAND  
**Pro Active**

## PROX'N'ROLL USB PC/SC CONTACTLESS SMARTCARD READER



### TECHNICAL SPECIFICATIONS

#### Contactless smartcard interface - Prox'N'Roll LITE

Standards	ISO/IEC 14443 A and B, T=CL
RFID carrier	13.56 MHz
Operating distance	1 to 5 cm depending on card and on environment
Card baud rate	106, 212, 424 or 848 kbit/s

#### Supported cards (partial list) :

- NXP (Philips) MIFARE Classic, Plus, UltraLight
- NXP (Philips) DESFIRE, SmartMX, ProX
- Infineon SLE66 family
- Innovision Jewel, Topaz
- Calypso (CD97, CD21, GTML, etc), Innovatron radio protocol

And virtually any ISO/IEC 14443 A or B compliant smartcard

#### Contactless smartcard interface - Prox'N'Roll

Standards	ISO/IEC 14443 A and B, T=CL ISO/IEC 15693 and 18000-3
RFID carrier	13.56 MHz
Operating distance	1 to 5 cm depending on card and on environment
Card baud rate	ISO/IEC 14443 : 106, 212, 424 or 848 kbit/s ISO/IEC 15693 : 26 kbit/s

#### Supported cards (partial list) : same as Prox'N'Roll LITE, plus

- NXP (Philips) ICODE1, ICODE-SLI, etc
- Texas Instrument TagIT
- ST MicroElectronics SR, SRI, SRIX families
- ATMEL CryptoRF
- HID iClass, Inside PicoTag
- ASK CTS256/CTS512

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

#### USB PC/SC interface

Standard	USB 2.0 full speed (12Mbps) - also supports 1.1 USB CCID profile - PC/SC v.2 compliant
Power supply	Bus powered ( ≈200mA under 5V)
Windows driver	CCID driver supplied by Microsoft Alternate SpringCard driver (WHQL-certified) for advanced operation
Linux and others	Open source pcsc-lite CCID driver
API and SDK	100% PC/SC – Free SDK available

#### Hardware specifications

Status indicator	3 LEDs (red, blue, green) Buzzer (85 dBA approx.)
Color	Blue wheels + black body
Dimensions (LxWxH)	75 x 75 x 25 mm
Housing material	ABS
Weight	≈ 150g
USB cable	≈ 1.80 m

#### Environment and safety

Operating temperature	-20 → +70°C
Storage temperature	-40 → +85°C
MTBF	500 000 hours
CE mark	EN50082 / EN5022 class B
Other standards	RoHS

### ORDER CODES

PART #	Description
PNRU-11	Prox'N'Roll USB - ISO/IEC 14443 + 15693
PNRU-10	Prox'N'Roll LITE USB - ISO/IEC 14443 only

#### PRECAUTIONS FOR INSTALLATION

This device is a contactless reader; it uses inductive coupling (magnetic field) to power the cards and communicate with them. Precaution must be taken to keep the reader far from any source of perturbation (e.g. other readers, computers, etc). Installing the reader near a metal surface (aluminium or steel plate, etc) will lead to shorter operating distance and increased power consumption. SpringCard has a long experience installing contactless couplers in various kinds of devices. Do not hesitate to contact us if you need any assistance.

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PRO ACTIVE company with a capital of 227 000 €

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