

Prox'n'Roll - SMARTCARD READER

Prox'N'Roll is a versatile 13.56MHz RFID reader highly configurable to read serial number or data from any RFID tag or contactless smartcards.

With 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 USB2.0 full speed (12Mbps), and has a fast smartcard baud rate (848kbps).

Two modes available: PC/SC or Scanner (details on page 2)

KEY FEATURES

- 13.56MHz HF RFID
- Contactless smartcards reader
- USB 2.0 full speed (12Mbps)
- Fast baud rate (848kbps)



APPLICATIONS

Loyalty programs, micro-payment, card issuing desk, user identification, access control, logistics, RFID asset management and tracking...

GENERAL SPECIFICATIONS

Dimensions / Weight	D81 x 30mm / 113g
Housing material	ABS
Frequency	13,56MHz (RFID HF, NFC)
RFID / NFC Standards	ISO 14443A-B, ISO 115693, NFC peer-to-peer (ISO 18092 initiator, passive communication mode) T=CL protocol on board
Operating distance	1 - 7,5cm depending on card and on environment
Card / Tag baud rate	26kbps (ISO 15693), 106/212/424/848kbps (ISO14443), 212/424kbps (ISO18092)
Antenna	Integrated, D5.5cm, balanced
Communication with host	USB 2.0 full speed (1.1 compliant) 12Mbps - powered by the host (<400mA @ 5V)
Standards	CCID 1.1 profile - PC/SC v2.01
Power	Powered by the USB bus (≈ 200mA under 5V)
Status Indicators	3 LEDs (red, blue, green) Single tone beeper (85 dBA approx.)
Cable / Connector	1,8m / USB Type A
Color	Blue wheels + black body
Operating Temperature	-20°C to + 70°C
Storage Temperature	-40°C to + 85°C
Humidity	0 - 90% (non condensing)
MTBF	500 000 hours
Environmental Approvals	RoHS, WEEE



Prox'n'Roll - SMARTCARD READER

PC/SC MODE

PC/SC is a specification for smart-card integration into computing environments. Prox'N'Roll PC/SC is supported by major operating systems. 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.

OR

SCANNER MODE

Its USB interface emulates a standard **keyboard** : no driver installation, no software required!

Traditionally, reading data from any RFID tag or contactless smartcard means developing a PC software to drive the reader step by step. Prox'N'Roll RFID scanner dramatically changes this paradigm: the reader is «autonomous» and performs all the job on its own. Collected data are then transmitted to the computer as if they were entered on the keyboard.

Thanks to the Prox'N'Roll RFID scanner, reading RFID chips is now as easy as reading a barcode. Prox'N'Roll RFID scanner is totally configured through a secure master card.

SUPPORTED CONTACTLESS SMARTCARDS

Partial list of supported chip:

- NXP(Philips) : ICODE1, ICODE-SLI, Mifare® Classic, UltraLight®, Desfire®, ProX, SmartMX
- Texas Instrument : TagIT..
- ST MicroElectronics : SR176, SRiX...
- ASK CTS256Band CTS512B..
- HIDiClass and Inside PicoTag...
- MultOS or JavaCard T=CLcards...
- Calypso transportation cards (subject to extra license fee)
- NFC mobile phones or other NFC-capable objects... (tag emulation mode)



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. AXEM Technology has a long experience installing contactless couplers in various kinds of devices. Do not hesitate to contact us if you need any assistance.