

# Tap'N'Drive

LOW POWER CONTACTLESS COUPLER



**Tap'N'Drive** is an ISO 14443 (A,B & B') and Mifare contactless reader/writer.

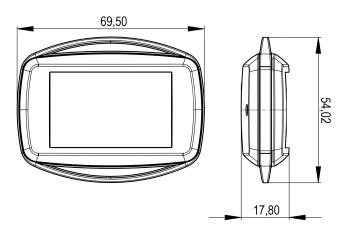
Featuring an innovative low power card detection system and designed to be installed behind a windscreen or a window, it is the ideal coupler for carsharing applications.

## **KEY FEATURES**

With its small size, **Tap'N'Drive** is ideal for in-vehicle application. A single cable conveys both single 12V DC power and the RS-232 interface.

The front panel shows 3 high-luminosity LEDs for user information.

The low power card detection system make it possible to put both the reader and its host system in deep standby mode until a contactless card, RFID tag or NFC object is waved other the antenna. The reader is customizable with your logo.





# A FEW TYPICAL APPLICATIONS

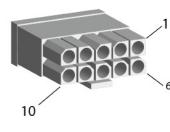
- Car-sharing,
- Battery-powered kiosks,
- Active display windows.

## **ABOUT SPRINGCARD**

**SpringCard** products are designed and manufactured in France, and distributed worldwide.

With 12 years of expertise in smartcards, contactless, RFID and NFC, **SpringCard** is the ideal partner to make your project a success

Connector: Molex



	pin	designation	type
	1	HOST_WAKEUP	OUT
	2	\RESET	IN
	3	FLASH	IN
	4	GND	PWR
	5	RFU	
	6	VIN	PWR
5	7	TX	OUT (RS232 Level)
	8	RX	IN (RS232 Level)
	9	GND	PWR
	10	RFU	

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# springcard

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# **TECHNICAL SPECIFICATIONS**

Contactless smartcard interface		
Standards	<b>ISO/IEC 14443</b> A, B and B'	
RFID carrier	13.56 MHz	
Operating distance	Up to 8 cm depending on card and on environment	
Card baud rate	106 kbps	
Supported contactless smartcards (partial list)	<ul> <li>NXP (Philips) MIFARE Classic &amp; UltraLight</li> <li>NXP (Philips) DESFIRE, SmartMX, ProX</li> <li>Calypso (CD97, CD21, GTML, etc)</li> <li>And virtually any ISO/IEC 14443 A or B compliant smartcard</li> </ul>	

Environment and safety		
Operating temperature	- 20 →+ 70°C	
Storage temperature	- 40 →+ 85°C	
MTBF	500 000 hours	
CE mark	EN50082 / EN55022 class B	
Other standards	RoHS, FCC pending	

Power supply					
3,3V to 24V DC					
		3,3V	5V	12V	24V
Consumption	Standby	1545μΑ	970μΑ	530µA	305μΑ
Consumption	Typical	105μΑ	75mA	50mA	35mA
	Maximum	210 μΑ	145mA	70mA	50mA

Serial Interface		
Connector	RS-232	
Baud rate	38400 or 115200 bps	
I/O lines	HOST_WAKEUP, /RESET and FLASH (TTL level)	

	Software
API and SDK	SpringProx API - Free SDK available API compliant with existing products (CSB4, K531, K632, K663)

Hardware specifications		
Dimensions (LxWxH)	70 x 55 x 18 mm	
Housing material	ABS	
Weight	45 g	
Cable	100 cm	
Connector	Molex 43025-1000	
Status Indicator	3 LEDs (Red, Orange and Green) Buzzer (85 dBA approx.)	

Self Adhesive foam		
color	black	
width	0.9mm	
temperature	-40°C →+120°C	
Resistant to: water, alcool, detergent		

## **ORDER CODES**

PART #	Description
SC14136	Tap'N'Drive

#### 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...). Installing the reader near a metal surface (aluminium or steel plate...) will lead to shorter operating distance and increased power consumption.

SpringCard has a long experience installing contactless couplers in various kind of devices. Do not

**SpringCard** has a long experience installing contactless couplers in various kind 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 € R.C.S. EVRY B 429 665 482 N.A.F. 722 C VAT #: FR 27 429 665 482

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