

\*\*\*PRELIMINARY\*\*\*

## FUNKYGATE WALL-MOUNTED CONTACTLESS READER



FunkyGate is a wall-mounted reader for residential or corporate access control. This contactless reader is a next generation device for high demanding access control systems. Thanks to its wide choice of output interfaces, FunkyGate can be integrated in any existing or new access-control system.

### KEY FEATURES

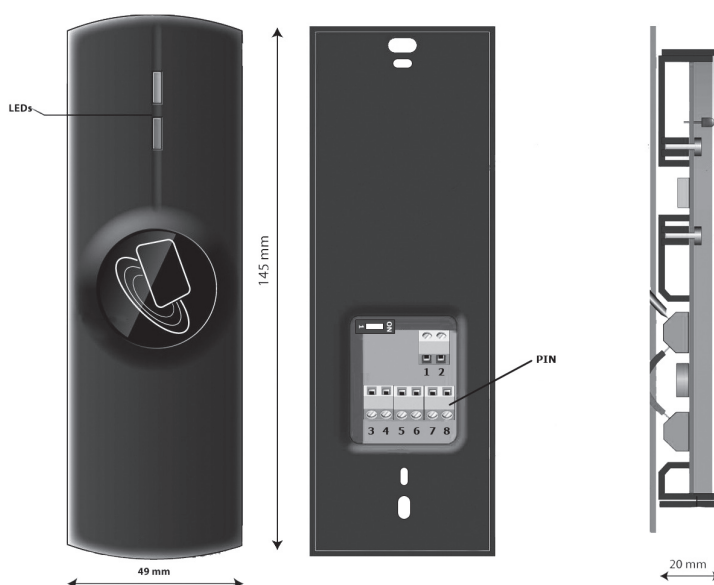
**Interoperability :** FunkyGate is not only able to read serial numbers from virtually any 13.56MHz contactless card but it is also able to fetch particular data from Mifare or advanced T=CL cards.

**Evolutivity :** FunkyGate configuration is made of 4 different sets, thus allowing different kind of cards to be used in the same time on the site. .

**Security :** FunkyGate is able to communicate with NXP DESFire, to verify a numeric signature and to diversicate authentication keys for top-of-art security level.

### A FEW TYPICAL APPLICATIONS

- high secured buildings access controll
- cash or vending machines



### 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.

### DETAILED VIEWS

PIN Assignements

	RS-485	Wiegand	Dataclock
1	VCC - 12V DC power supply		
2	GND - common		
3	RS-485 bus A	Unconnected	Unconnected
4	RS-485 bus B	Unconnected	Unconnected
5	Unconnected	Data 0 output	Data output
6	Unconnected	Data 1 output	Clock output
7	Unconnected	Red LED input	
8	Unconnected	Green LED input	

#### HEADQUARTERS, EUROPE SPRINGCARD

13 voie la Cardon  
Parc Gutenberg  
91120 Palaiseau  
FRANCE

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

#### AMERICAS SPRINGCARD

964 Fifth Avenue  
Suite 235  
San Diego, CA 92101  
USA

Phone : +1 (619) 544 1450  
Fax : +1 (619) 573 6867

[www.springcard.com](http://www.springcard.com)

A PRO ACTIVE BRAND  
**Pro Active**

## FUNKYGATE WALL-MOUNTED CONTACTLESS READER



### TECHNICAL SPECIFICATIONS \*\*\*PRELIMINARY\*\*\*

#### 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	up to 6 cm depending on card and on environment
Card baud rate	106 kbit/s (14443) 26 kbit/s (15693)

#### Supported cards (partial list) :

- NXP (Philips) ICODE1, ICODE-SLI, ...
- 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...)<sup>1</sup>

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

<sup>1</sup> Calypso card operation is subject to an extra license fee. Contact us for information.

#### Hardware specifications

Dimensions (LxWxH)	161 x 57 x 29 mm (approx)
Housing material	ABS polylac 757 (UL94-HB)
Color	Black
Weight	≈ 240g

#### Environment and safety

Operating temperature	-20 → +80°C
Storage temperature	-40 → +85°C
Power supply	12V +/-10% DC - linear supply recommended
Consumption	average 120mA (at 12V DC) peak: 300mA (at 12V DC)
MTBF	500 000 hours
CE mark	EN50082 / EN55022 class B
Other standards	RoHS

#### RS485 mode<sup>2</sup>

2-wire RS-485 serial bus with optional addressing  
Up to 8 readers can be operated on the same bus

Distance to controller	max 30m
Baud rate	1200, 2400, 4800, 9600, 19200 or 38400
Output format	Hexadecimal string, 4 to 16 bytes (8 to 32 chars)
LEDs and buzzer	Driven by short commands on the serial link

#### Dataclock mode<sup>2</sup>

2-wire interface DATA1 & DATA0 (active low)

Distance to controller	max 30m
Output format	32 bits BCD (10 digits) ordinary 4 to 16 bytes
LEDs and buzzer	Driven by the controller (2 input lines, active low)

#### Wiegand mode<sup>2</sup>

2-wire interface DATA1 & DATA0 (active low)

Distance to controller	max 30m
Output format	Binary 4 to 16 bytes
LEDs and buzzer	Driven by the controller (2 input lines, active low)

<sup>2</sup> Output format, baud rates and related transmission options are fully configurable through PC-link connector (IrDA interface) or using master cards

#### Security and configuration

Interface infrared for configuration

Anti-tamper facility	2 magnet sensors: - on the back-side to stop removing - on the front-side to stop opening
----------------------	---

#### ORDER CODES

PART #	Description
IWMX-10	FunkyGate wall mounted contactless reader dataclock/wiegand/RS485

#### 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 hesitate to contact us if you need any assistance.

Information in this document is subject to change without notice.

Copyright © PRO ACTIVE SAS 2008, all rights reserved.

Reproduction without written permission of PRO ACTIVE is forbidden.

SPRINGCARD, PRO ACTIVE, and both logos are registered trademarks of PRO ACTIVE SAS.

All other trademarks are property of their respective owners.

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

France

[www.springcard.com](http://www.springcard.com)

A PRO ACTIVE BRAND

**Pro  
Active**