

FUNKYGATE

WALL-MOUNTED CONTACTLESS READER



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

A FEW TYPICAL APPLICATIONS

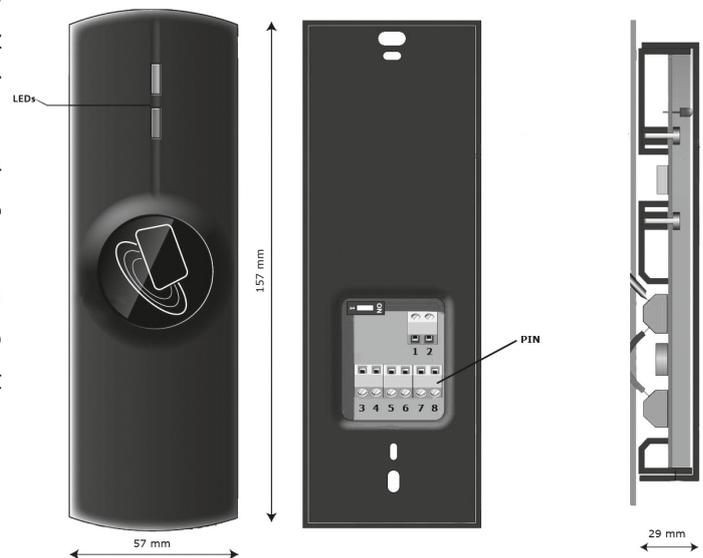
- high secured building access control
- cash or vending machines

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	

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TECHNICAL SPECIFICATIONS

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) : <ul style="list-style-type: none"> ▪ 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...)¹ And virtually any ISO/IEC 14443 A or B compliant smartcard, or ISO/IEC 15693 compliant RFID label	

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

Hardware specifications	
Dimensions (LxWxH)	157 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 ²	
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 ²	
2-wire interface DATA1 & DATA0 (active low)	
Distance to controller	max 30m
Output format	32 bits BCD (10 digits) or binary 4 to 16 bytes
LEDs and buzzer	Driven by the controller (2 input lines, active low)

Wiegand mode ²	
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)

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

Security and configuration	
Infrared interface for configuration : on the field configuration through master cards	
Anti-tamper facility	2 magnet sensors: - on the back-side to stop removing

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.