



## Crazy UHF USB UHF USB reader

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The Crazy UHF USB has an integrated antenna with a practical reach of 10cm to 1m.

The integration of the Crazy UHF USB to your project will be helped by SpringCard Companion which will allow you to set up quickly and easily you device.

The Crazy UHF USB is an open product, a toolkit that we offer to let you discover the UHF technology and the infinite applications in which it can be useful.

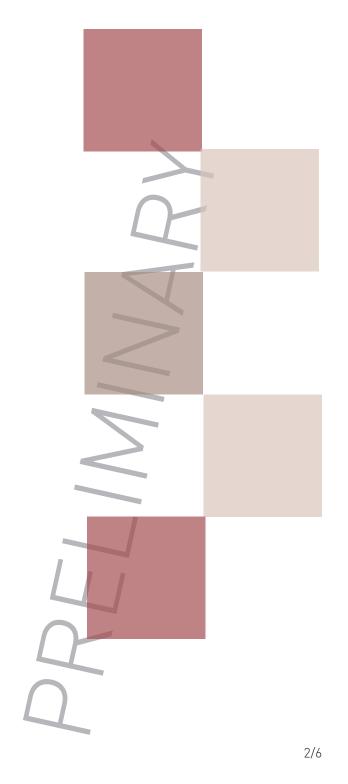
This new UHF USB product operates on a carrier frequency of 868 MHz (in Europe) and 910 MHz (in the US). The tag will send its identification informations to the reader.

#### TYPICAL APPLICATIONS

- Hand free badges for access control (ex: Ski data passes feig reader)
- Content inventory (bags, boxes containing less than 100 components)
- Interactive personal shopping (advices based on the bag content)
- Enhancement of security (protection against theft)

#### **KEY FEATURES**

- USB communication with host
- Possibility to choose between one integrated antenna and an external one or two external antennas



## Crazy UHF USB UHF USB reader schemes

The following table introduces you the main pinouts of the Crazy UHF USB along with their characteristics and functions.

The Crazy UHF USB can be powered through USB (3.3V to 5V).

Name	Function	Characteristics / Reference
J6	Power / Communication with host	USB / JST (BM05B-SRSS- TB (LF)(SN))
U25-U28	Antenna	Coax cable / U.FL-R-SMT-1(10)
P1	Debug	SM08B-SRSS-TB(LF)(SN)
LED	State indicator*	Always ON

### \* LED signification:

LED4: RF Power ON/OFF

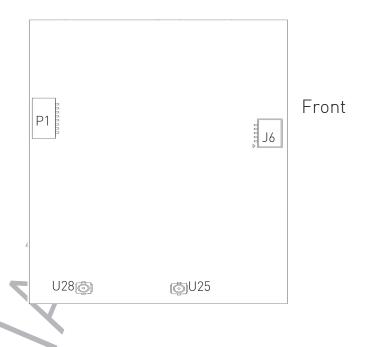
LED1, 2 & 3: When ON your Crazy UHF USB is operational

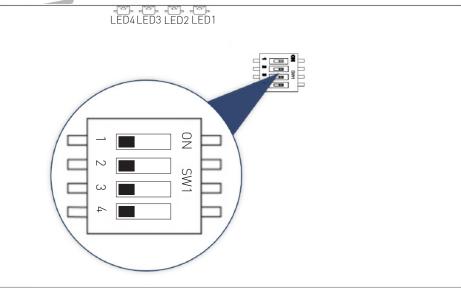
#### Switches signification:

Switch1: ON/Flash via J6 Switch2: ON/Flash via P1

Switch3: Antenna selector (optional)

Switch4: Not used





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### **Crazy UHF USB**

### UHF USB reader accessories

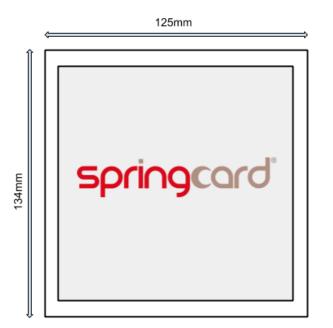
### The asymetric antenna

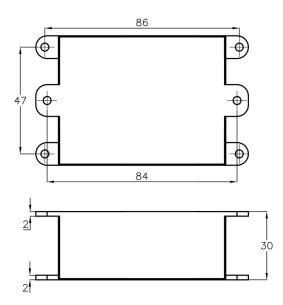
This antenna without housing is 108mmx108mm. With housing the size of the antenna is 134mm x125mm.

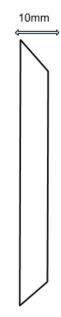
It allows you to read badges and RFID UHF tags, from 10cm up to 1m.

### The SpringBox I

We designed this box to accomodate all SpringCard 69x45mm boards and antennas. It can be cut, drilled, machined in a customised way.







### Technical specifications

Card/tag baudrate  Communication with host  SDK  SDK  SpringCard Companion  In-field firmware upgrade  Visual  Power  Size (LxH) - weight  Cable / connector  Communication with host  USB  SpringCard Companion  No physical action on the device using SpringCard Companion  4 LEDs and buzzer  3.3V up to 5V DC  69x45mm - Weight: 34g / Antenna size: 108x108mm (with Cable / connector)		
RF power level  Operating distance  Card/tag baudrate  Communication with host  SDK  SpringCard Companion  In-field firmware upgrade  Visual  Power  Size (LxH) - weight  Cable / connector  Typical 10cm up to 1m (depends on the tag)  USB  SpringCard Companion  No physical action on the device using SpringCard Companion  4 LEDs and buzzer  69x45mm - Weight: 34g / Antenna size: 108x108mm (with Cable / connector)		
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Cable / connector  Coax cable between antenna and reader	3.3V up to 5V DC	
	69x45mm - Weight: 34g / Antenna size: 108x108mm (without housing)	
Temperature Operating Temperature: -20°C + 70°C Storage temperature	Coax cable between antenna and reader	
	Operating Temperature: -20°C + 70°C Storage temperature: -40°C + 85°C	
Humidity 90% (without condensing)	90% (without condensing)	
MTBF 500 000 hours	500 000 hours	
Approvals -	<del>-</del>	
Environmental approvals RoHS	RoHS	
Warranty 2 years		

# springcard

SpringCard offers a wide range of products to answer to all our needs and possible uses. With 18 years of experience in contactless smartcards, communication technologies and the development of embedded and mobile systems, the R&D team of SpringCard is a valued partner to design your own solution or product.

