



SRF-C220 UHF RFID Reader User's Manual

Overview

As a long-range hand-held radio frequency identification (RFID) reader, the SRF- C220 is a 900MHz (UHF band) UHF RFID reader operable at various operating bands specified by individual countries. It also complies with all standard protocols defined in ISO18000-6C (EPC GEN2).

Relevant equipment

1. SRF- D190: Long-range stationary RFID reader with an ideal sensing range over 10m for use on driveway and access control systems.
2. SRF-D390: High-sensitivity RFID reader with an ideal sensing range over 20m for use in special environments.
3. SCR-F180: RFID controller automatically resetting and adjusting parameters in the field to increase sensing range and adjust other functions.

Features

- Support 900MHz (UHF band) and comply with tags specified in ISO18000-6C (EPC GEN2).
- Compact appearance design, built-in antenna and RF module, convenient to carry.
- Card code directly display on the LCD screen.
- Built-in 80 set storage space .
- Sensing range more than 1 meter .
- Special energy-saving design reduces power consumption.
- Avoid the interference of other radio frequencies with the look-up table frequency-hopping spread spectrum(FHSS)
- Pass R&D patent for EMI reduction in many countries.
- Pass NCC/FCC certification
- Built-in lithium battery without the need of external power supply. Work continuously for at least 4 hours in normal use after fully charged.
- Micro USB interface for connection with the power bank.
- Apply to single data processing.

Points for attention

1. The product pattern is certified by the FCC. Unauthorized modification of the frequency, power, or originally designed functions and characteristics of the RFID reader are prohibited.
2. Lithium battery inside, keep product away from hot environments (over 60°C) such as inside a car due to the built-in lithium battery.
3. Lithium battery inside, store product in an environment below 40°C if not in use for some time.
4. Do not over discharge or overcharge product to prevent battery from damage and reduce battery life.
5. Although the power indicator is blue, the battery may be unable to activate the Bluetooth device. Please charge product first or connect to an auxiliary power supply.

Recommended uses

- UHF RFID registration management system.
- Logistics related management.

**Certification**

- NCC :
- FCC :

Federal Communications Commission (FCC) Statement**15.21**

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference and
- 2) this device must accept any interference received, including interference that may cause undesired operation of the device.

RF exposure:

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

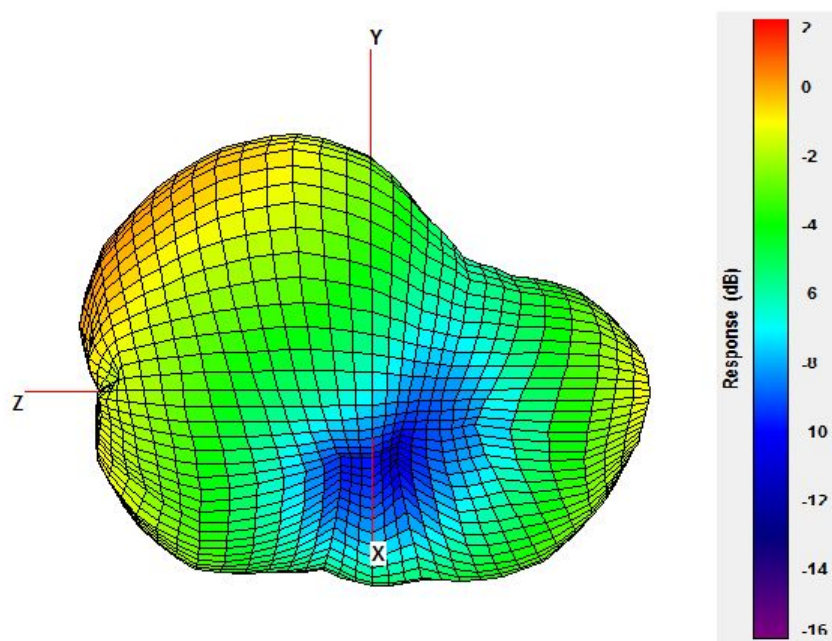
For body worn operation, this reader has been tested and meets FCC RF exposure guidelines when used with an accessory that contains no metal and that positions the handset a minimum of 5 mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.



Product Specifications

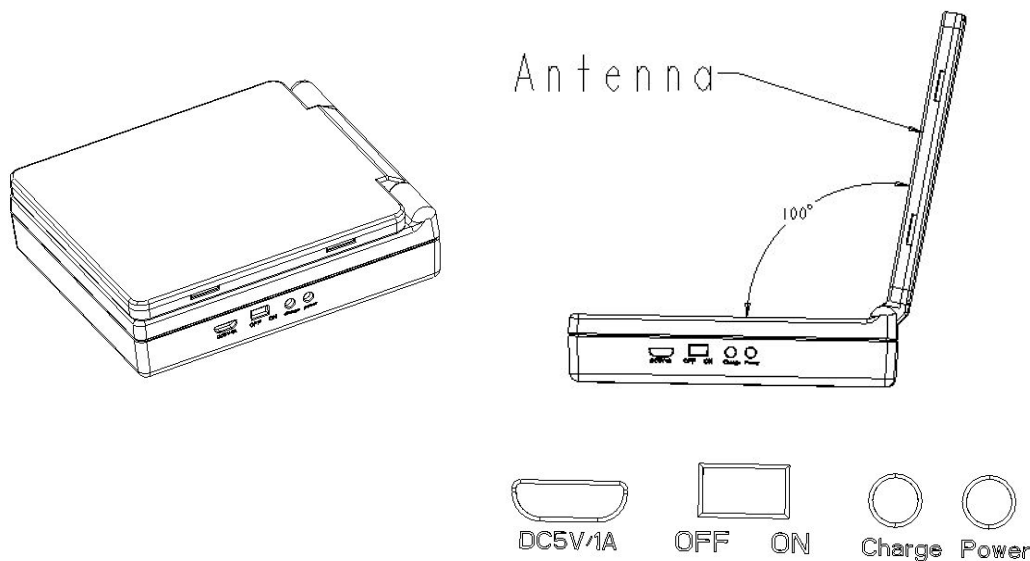
Input voltage	Built-in lithium battery
UHF Antenna gain	0.5dBi (linear polarization)
Antenna receiving	50 ohm U.FL.
Operating frequency	902-928 MHz
Emission power	24.7 dBm
Modulation scheme	PR-ASK, ASK
Current	<300mA (Max)
Protocol	EPC Gen2 (ISO 18000-6C)
Receiving sensitivity	-81 dBm
Sensing range	>50cm
Operating temperature	0°C ~ +45 °C
Storage temperature	45°C (1 month)
Humidity	5-90%
Dimensions	110x95x32mm
Weight	250g

Antenna Pattern





Appearance



1. Charger input.
 - 1.1. Charger specifications: DC 5V/1A
 - 1.2. Micro USB compatible with the smartphone and tablet charging interface.
 - 1.3. Support power bank to operate and charge the UHF RFID reader at the same time.
 - 1.4. Work continuously for at least 4 hours in normal use after fully charged.
2. Power switch
 - 2.1. ON: Turn on the UHF RFID reader.
 - 2.2. OFF: Turn off the UHF RFID reader.
3. Charge indicators
 - 3.1. Red: Charge in progress.
 - 3.2. Amber: Fully charged and remove charger to prevent overcharge.
 - 3.3. No signal: No charging behavior.
4. Power indicators
 - 4.1. Blue: The battery of the UHF RFID reader is discharging.
 - 4.2. No signal: The UHF RFID reader is off or the batter level is low.
5. Antenna
 - 5.1. Antenna gain is 0.5dBi.
 - 5.2. Please aim the antenna at the tag to facilitate reading data in the tag.
 - 5.3. Rotate at 100° for users to aim at the tag more easily.



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Warranty

1. This product is covered by a one-year warranty from the date of purchase.
2. Warranty covers free inspections and repair of the product to good condition if there are problems or poor product condition.
3. Warranty does not cover product damage due to an act of God (e.g. flood, fire, earthquake, typhoon, thunder strike, etc.).
4. Warranty does not cover willful damage (e.g. scratch, fall, impact, etc.) or damage due to negligence (loss, loosened screws, etc.).
5. Warranty will be voided if labels on the case are removed or damaged.

