

## 13.56M RFID Reader module Model: HF20



### Introduction

HF20 is small size, 13.56M RFID card reader module, with TTL interface, It programmed with client mifare card secure code and read certain data from the card, once card is read successful, the data is sent to host via TTL interface.

Host may enable or disable the on board white LED communication via TTL.

### Feature

TTL interface; Read pre-programmed mifare card data.

12V DC working voltage

### Specification

Support client programmed mifare card	
Size	41*26mm
Power input	12V DC @ 100mA
Interface	TTL, 9600, N,8,1
Reading distance	2-4 cm
Frequency	13.56M
Operation temperature	-30 C to +60 C
operation humidity	5%-95% relative humidity non-condensing
Audio/Visual Indication	LED
Weight	12
card number output format	TTL, ASCII

### Wiring and Function

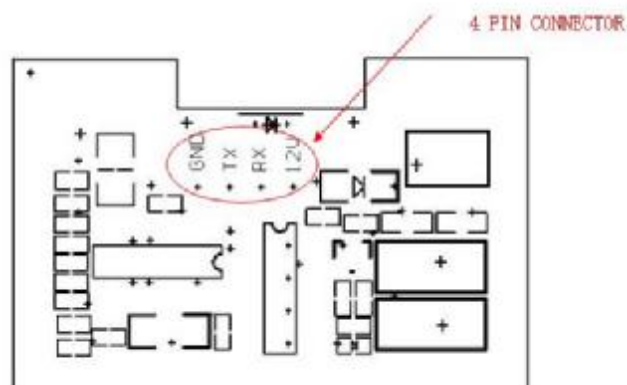
Connect module to host by 4 PINs connector  
Once card is detected well, RED LED will Flash one time and data is sent via Tx to host

Turn on White LED:

Host send "ON" in ASCII to module

Turn off White LED

Host send "OFF" in ASCII to module



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.

Note: 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 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### FCC Radiation Exposure Statement

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Attention: Limited Modular Approval - this RF Module may not be sold to the generic public and requires professional installation. Due to the fact that this RF Module is not equipped with an own shielding, the end-product incl. this RF Module has to show compliance to the FCC rules (15C / radiated emissions).

(OEM) Integrator has to assure compliance of the entire end-product incl. the integrated RF Module. Additional measurements (15C) and/or equipment authorizations (e.g either a complete new certification or a Class II Permissive Change) may need to be addressed depending on co-location or simultaneous transmission issues if applicable.

Integrator is reminded to assure that these installation instructions will not be made available to the end-user of the final host device.

The Integrator will be responsible to satisfy SAR/ RF Exposure requirements, when the module integrated into any (portable, mobile, fixed) host device.

The final host device, into which this RF Module is integrated" has to be labeled with an auxiliary label stating the FCC ID of the RF Module, such as "Contains FCC ID: 2AR9A-HF20".