

PRODUCT NAME**YCH-PUHF-9****UHF 6C Long Range Wiegand Reader Brochure****Introducti**

PUHF-9 is an ultra high frequency long range wiegand reader read up to 7 meter (free air reading) depends on the interference on site and proper card reading angle.

PUHF-9 compatible with multi-protocol, integrated design, quick read, multi-tag read and can used widely in RFID systems. UHF has limited signal penetration against tinted solar film.

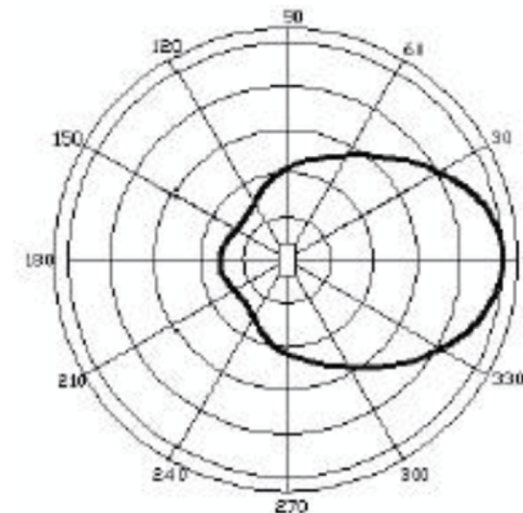
PUHF-9 complete with mounting bracket and power supply, housing made of PET material which is weatherproof against sunshine and rain. Ideals for access control tracking system, car parking

ProductOverview:

- Integrated UHF long range reader, using the UHF band RFID technology, which has the following characteristics:
- Operating frequency 860 ~ 868MHz or 902 ~ 928MHz, adjusted according to different countries and regions;
- Directional antenna technology, recognizes only the front of the card reader;
- Power is less than 0.5W, in line with international environmental standards;
- Used in a metal chassis, or used independently;
- Reading distance 8-10 meters (depending on the antenna);
- Support eligible ISO1800-6B, ISO1800-6C (EPC G2) protocol passive RFID cards;
- Using standard wigand 26/34 output interface for direct access to wigand Interface System;
- Working mode: ground sensor mode or continuous mode;
- Reserve RS232 \ RS485 interface, which can be connected to a PC.

Basic function**Data transmission line**

After reader powered card reader immediately into the search mode or trigger mode and receive data packets from the electronic tags, and then output.

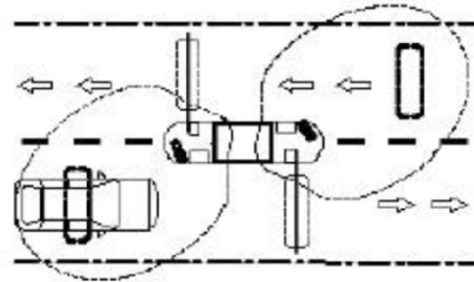
Reader antenna polarization

Wiring Diagram

Red	DC+9~12V	Blue	WG D1	White	RS485A+	Orange	TXD --- (RS232)
Black	0V	Green	WG D0	Purple	RS485B-	Brown	RXD --- (RS232)
Black	0V Ground	Yellow	Short cut to loop signal				

Installation and commissioning:

The entrance and exit readers were installed at both ends of the corner of the booth to prevent signal interference.



Commissioning

- Readers should not face to each other to avoid reading conflicts.
- The distance between two readers is at least 2.5m.
- U-shaped mounting bracket can be used to adjust the angle of the reader in order to achieve the best reading distance.

Power up

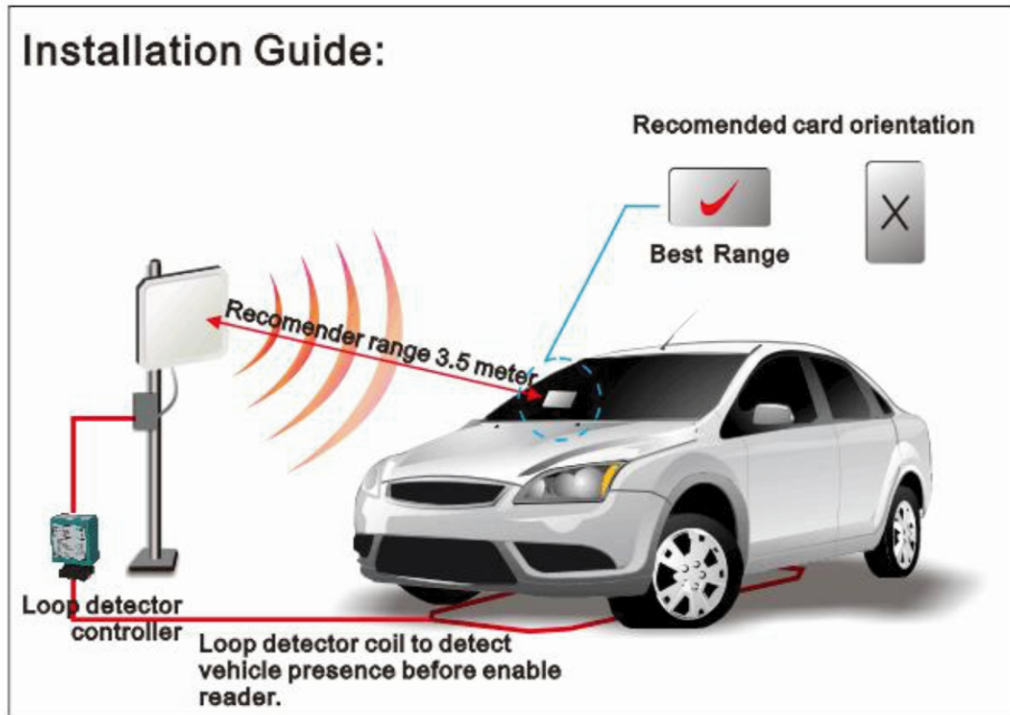
When powered on, the buzzer will 'Didi' even rang twice, then the device to work. If you do not hear the sound, check the power supply is connected correctly.

Reader test

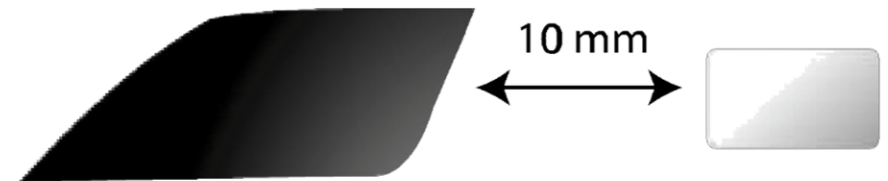
Let the cards in front of the reader to move around. After reading card Number, the buzzer will sound and the red LED will blink inside the panel.

Do not stick the card in the palm of the hand or on the body, and do not use the card posted on the metal object, it will affect the reader results.

Installation Guide:



Distance between windscreen and card



Best distance between car windscreen and card minimum 10mm clearance. Card should not attach directly to the windscreen surface.

OPERATION CONSTRAINTS:



Reading range will decrease if there is metal tinted solar film such as Air- cool and etc.

UHF can **NOT** pass through solar film with heavy metal oxide such as

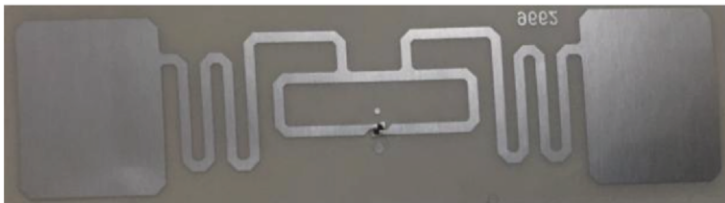
VKOOOL. If heavy metal oxide total block UHF signal, might require user to wind down windows for about 20cm to allow UHF signal penetration into car and read card.

For best reading result, recommended to cut a rectangular slot on the film to allow UHF signal to pass through.

UHF Card Specification:



UHF card is made of PEC material that can withstand heat at vehicle windshield.



UHF Sticker it can not attach to metal surface directly. If so no signal at all, must attach on the plastic surface

RF Characteristics

UHF band
Passive; RF Backscatter

Read Distance

Up to 700cm in free air (Depend on operating environment and windshield solar film)

Memory

64 bits Read only (38 bits Unique ID, 16bits CRC)

Multiple Read Capability

50 tags per second (ID Read)

Multiple-Read

Yes, Binary-tree

Physical Characteristics

Length : 85 mm
Width : 53 mm
Thickness : 1 mm

Operating Temperature

Typically -20°C to 65°C

Life

10 years

Ordering Information

- PUHF-9 reader complete with power supply and mounting bracket
- JTU6C-9C Passive Sticker
- JTU6C-9C Passive UHF Card
- CU-56 UHF card+13.56MHZ dual frequency card
- DU-59 UHF card_125MHZ dual frequency card
- CS-56 Card Sticker