万全
VANCH

IoT+ Professional RFID Manufacturer & Solution Provider

www.vanch.net

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VANCH
UHF RFID SYSTEM
PRODUCT MANUAL

VANCH

WORK WITH ONE HEART DO OUR LEVEL BEST.

DIRECTORY

INTRODUCTION

ABOUT US

万全 VANCH

The whole world has been quickly entering the mobile Internet, Internet of Things.

It is increasingly profound changes in our industry and life. Every day, thousands of people around the world use VANCH's products, and in the best way to improve theirwork and living space , their satisfaction is our greatest success.

We believe that VANCH will bring you more perfect service and support.

COMPANY INTRODUCTION

As a professional wireless radio frequency product and solution provider, Shenzhen Vanch Intelligent is committed to promoting the application of RFID technology in various industries and help client to improve their efficiency, manage–ment, intelligentialize and informatization by using leading technologies, products and rich experience in the field of RFID. Applications in warehousing management, personnel management, asset management, industrial automation, intelligent transportation, smart cities, logistics, retail, product traceability, etc. The company has obtained more than 40 patents and was awarded as a high–tech enterprise and software development and design enterprise. The products have passed CE and FCC certification and are exported to more than 60 countries and regions around the world.

CORPORATE MISSION

Promote the application popularization of wireless identification technology, and change people's work and life with VANCH products.

CORPORATE VISION

Become the world's leading RFID products and solution provider;
Become a happy enterprise.

National High–Tech Enterprise	Software Design & Devel–opment Enterprise	Product Distribution Network	Patent Licensing
		60+	40+

CORPORATE CORE VALUES

Enterprise

Constantly strive to become stronger, following the evolution of heaven and earth, strive ourselves improved, strong and firm, working hard and never stop.

Responsibility

Know obtaining and returning, when team and individual obtain benefit, we should undertake returning to society.

Dream

To be a dream company, we work with our dream. We achieve dreams of the team and individuals.

Responsibility

Knowing how to get and return, organiza–tions and individuals also bear the respon–sibility they deserve.

QUALITY POLICY

A — Inspiring customer by innovative thinking

We insist on technical innovation, ensure to invest more fund on research and development, leading the industry trend by innovation.

B — Reassuring customer by profes–sional manufacturing

We insist on professional manufacturing, being strict on quality system, to obtain customer's trust by quality.

C — Relieving customer by high grade service

We insist on customer priority, providing high quality service and working hard for 100% satisfaction.

D — Attracting customer by good reputation

We insist on reputation first, keeping business credibility and making "VANCH Intelligent" to be an excellent brand.

GROUP PROFILE

2006

- October 23, 2006 Shenzhen VANCH Intelligent Technology Co.,Ltd. was incorporated.

2010

- In 2010, VANCH obtained the utility model patent certificate and CE EU certification for Bluetooth communication UHF handset,UHF multi-antenna splitter, UHF portable mobile reader and other products.
- In June 2010, VANCH was rated as "Deputy President Unit" by Shenzhen RFID Industry Standards Alliance.
- In December 2010, VANCH' S fixed reader/writer VF-747 received a utility model and a patent certificate for appearance. This product with excellent performance was unanimously praised by the market.

2011

- In April 2011, VANCH's RFID products (reader, antenna, label) design, production, and service passed the ISO9001:2008 standard quality management system certification.
- In September 2011, VANCH was involved in the design and construction of the Shenzhen Intelligent Transportation Project organized by the Shenzhen Municipal Traffic Police Bureau.
- In October 2011, VANCH initiated the research and development of the RFID UHF handheld device and the American British FM R2000 UHF module.

2012

- The development of technical platform of the 626 (RFID integrated reader), 218 (RFID fixed reader), 208 (Aowei AS3992 RF platform) in the 2012 era began simultaneously, which is the basis for VANCH's technical strength in the RFID field.
- In November 2012, VANCH was rated as "Deputy President Unit" by Shenzhen.

2013

- Internet of Things Technology Application Association.VANCH Joined Shandong Internet of Things Association in April 2013.
- In May 2013, VANCH won the bid for the RFID management project for special operations vehicles in Saudi Arabia, and supplied more than 2000 sets of readers.

2015

- VANCH introduced the fissile entrepreneurial business model in July 2015 and established Shenzhen VANCH IOT Intelligent Technology Co., Ltd.
- In 2015, VANCH won the "2015 IOT Star RFID Reader Equipment Enterprise Award".

2016

- In April 2016, Shenzhen VANCH Security Technology Co., Ltd. was established.
- In May 2016, "VANCH RFID Jewelry Counting Machine" won the "Intellectual Star" RFID Innovation Product Award.
- In 2016, VANCH's Linux platform X+ series UHF RFID reader product line was launched.

2017

- In January 2017, VANCH became a member of the Industrial Internet Industry Alliance formed by the China Information and Communication Research Institute.
- In June 2017, VANCH was awarded the title of Guangdong Provincial Contract-honoring and Credit-Reliable Enterprise.
- In July 2017, VANCH became a member of PEIPC (International Printed Electronics and Intelligent Packaging Industry Association).
- In August 2017, Shenzhen VANCH Intelligent Technology Co.,Ltd. was named as "High-tech Enterprise".
- In October 2017, VANCH's UHF RFID fixed reader was selected as the "Most Influential Fixed Reader Innovation Product Award" by China Internet of Things Industry Application Alliance.

2018

- In January 2018, VANCH joined the member department of the China Department Store Business Association Unmanned Branch.
- In June 2018, Shenzhen VANCHIOT Information Technology Development Partnership was established.
- In July 2018, VANCH's Android UHF RFID reader was named "IOTE2018 Gold Award Innovative Product".

VANCH ADVANTAGE

Quality Advantages

- We are the earliest enterprise involved in professional UHF RFID products' design and development.
- Our R&D Management Team has more than 10 years' experience in RFID market.
- We are positioned to do a world –class company for Internet of things.

Quality Advantages

- Our company obtains ISO 9001 enterprise standard certification, so quality is assurance.
- Our products have the certification of CE and FCC, in line with export requirements.
- Our components of products use international brand suppliers to ensure quality.
- Our products undergo a rigorous high and low temperature testing before they leave factory.

Industry Applications

- RFID based City intelligent tran portation management system;
- RFID based retail, garment/–clothes management system;
- RFID based warehouse/asset management system;
- RFID based dangerous Goods tracking system;
- RFID based food Traceability and anti–fake management system;
- RFID based Factory production line management system;
- RFID based library management system;

Product Advantages

- Rich products serial, suitable for different application environment.
- Cost–effective Product, high, med –ium and low grade of product design adapt to different needs.
- Product appearance patent design is suitable for industrial environment.
- Rich Communication interfaces and input and output interface are conve–nient for system integration.
- Product design is compatible with international standards, adopting inte –rnational advanced technology.

Technical Advantages

- Our RFID Products have our own independent intellectual property rights, with more than 40 patent certificates.
- Our RFID Reader hardware adopt 64–bit ARM processor, RF compo–nents use world well–known brand chip to keep fast and stable read and write performance.
- Compatible with multi–protocol tag reading, detailed designs of demo apps functions commissioning.
- Multi–languages SDK, which is good for system integration develop–ment.

Service Advantage

- Guarantee customer's rights, please dial customer's complaints hotline 13510003561;
- 7 days * 24 hours after–sales technical service hotline, contact 0755–82426775–607.
- Problems can's be solved by remote–control support, we commit–ted to:

Technical member visit the project site within 12 hours in Guangdong province;

And 48 hours arrived in other provinc–es.

- Provide guideline for customer's software development;
- 2 years warranty, and repair for the whole life of our products.

PROFESSIONAL R&D AND PRODUCTION

CNC Machining

PCBA Test

PCBA Production

Mold Shell Production

Production And Manufacturing

Reader Test

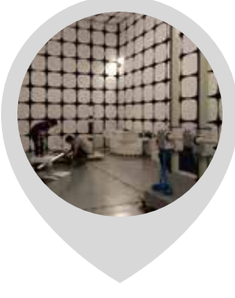
Spectrum Simulation

Microwave Darkroom Test

Gain Test

Product Testing

ESD Test



Electromagnetic Interference Test

Reader EMC Test

High And Low Temperature Test

Product Detection

HONOURS QUALIFICATION

UHF

RFID Reader Series

The application environment of RFID is variable and volatile,
is your reader able to cope with it ?

- Adopting UHF reader chip and 64-bit ARM processor + Linux platform, Read and write operations are fast and stable, compatible with multi- protocol RFID tag reading.
- Support dual-band protocol segment free switching work. RSSI (Return signal strength Inspection) Debugging software multi-communication mode interface, PoE powered.
- Supply SDK with multi-language, benefit to system integration development.

Guide of selecting UHF RFID Integrated Reader

Advantages of UHF RFID Integrated Reader

- The antenna and reader board are integrated in the sealed housing, and the working protection level can reach IP67 or above;
- Since the housing of the back cover of the reader is made of metal material, it is convenient for RFID reader to dissipate heat, which is beneficial to long-term outdoor work;
- RFID integrated reader's interface is simple to wire, mainly for power and communication lines, very suitable for rapid deployment;
- RFID integrated reader's accessories clip pole is easy to install, non-professionals person can also construct it;
- RFID integrated reader has a beautiful appearance, and the cover can be mass-produced by ABS plastic for industrial design molds; and anti-aging and anti-UV formulas are added;
- RFID integrated reader is cost-effective, the price is relatively cheap.

Application field of UHF RFID Integrated Reader

- The integrated reader/writer is mainly used for the identification of vehicles and personnel, the identification of industrial production line materials, etc., and the non-intensive need to read a large number of labels;
- The integrated reader reading distance can be based on the use of the scene, the need to read the distance, antenna illumination angle to select different gain size, illumination angle of the integrated reader;
- VANCH Intelligent has 2dBi, 5dBi, 7dBi, 9dBi, 12dBi antenna to integrate with reader board respectively, corresponding reading distance of 2 meters, 5 meters, 7 meters, 9 meters, 12 meters, etc. (can adjust the output power of the reader to adjust the reading distance).

UHF RFID
RFID Integrated Reader

VI-83T






VI-83T Specification

- Industrial design with power supply, direct-current 9 ~ 24V wide voltage input;
- The shell is made of high-strength aluminum alloy, solid and durable, which is good for heat dissipation and long-term outdoor work;
- The integrated chip for RF transmission is low power consumption& high integrated &high stability;
- RF receives adopts three-stage amplifying receiving circuit that greatly improves the receiving sensitivity of RF signal;
- Power amplification uses high-power, high-efficiency famous RFMD amplifiers to ensure RF reading and writing fluent;
- STM Cortex-M3 core CPU processor posses ultra-low power consumption, ultra-high performance, make the reader program and interface run more stable and faster;

UHF RFID Parameter	
RFID reader module	VANCH brand
Frequency range	902～928MHz or 865～868MHz (customization optional)
Antenna gain	7dbi Circular polarization antenna
Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C
RF output	30dBm（±1dBm）adjusted
Output power adjustment	1dBm (set by Vanch software)
Reading distance	Reading distance 3～5M (test tag Impinj E41b) ; writing distance>50cm
Multiple tag reading rate	＞50pieces/second（peak）
Region support	America, Canada and other FCC Part 15 compliant regions Europe and other areas that comply with ETSI EN 302 308 China, India, Japan, Korea, Malaysia, Taiwan

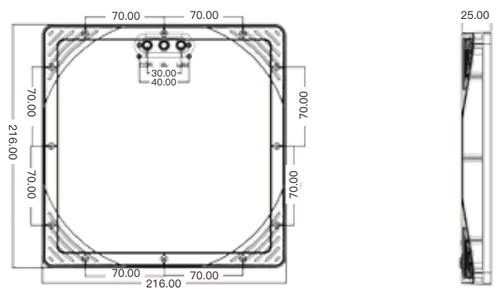
Electric parameter	
CPU control chip	ARM（STM32F107 Cortex-M3）
Communication Interface	RJ45, RS485, RS232, Wiegand interface; wireless WIFI, Bluetooth 4.2 Optional ✓
Bluetooth	Bluetooth 4.2 Optional ✓
WiFi	IEEE802.11b/g/n Optional ✓
Serial port rate	9600～115200bps
RJ45	10Mbps
GPIO interface	1 relay output, 1 trigger input

Reliable firmware upgrade	Extensible upgrade mechanism
Software Development Kit	c++ java c# c++Library cross-platform (windows/linux/osx)
Reading tags indication	Buzzer, Led
Average Power consumption	<10W
Power supply (air joint)	220V AC input, +9V/3A DC output power converter

Circumstance parameter	
Humidity	5%~95%RH (non-condensing)
Protection level	IEC IP67
Operation temperature	-20℃ ～ + 60℃
Storage temperature	-40℃ ～ + 80℃
Automatic heating device	Automatic heating device is needed when working under -40℃ temperature
Earthquake resistance height	1.2m / 6.56ft
Thunder protection	Direct-current earthing

Physical parameter	
Dimension	217 (L) * 217 (W) * 70 (H) mm (Bracket not included)
Weight	2.5kg (package included)
Outside shell material	ABS + PC
Antenna branch material	Galvanized rust-proof iron
Installation mode	Pole mounting
Antenna cover color	Ceramic white or warship ash
Antenna back cover	Die-cast aluminum alloy

Dimension



Antenna Cover Color (Optional)

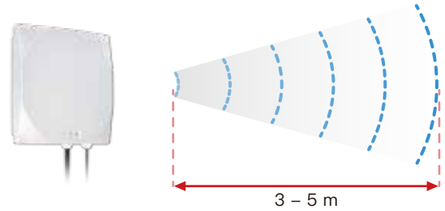
Ceramic White

Warship Grey

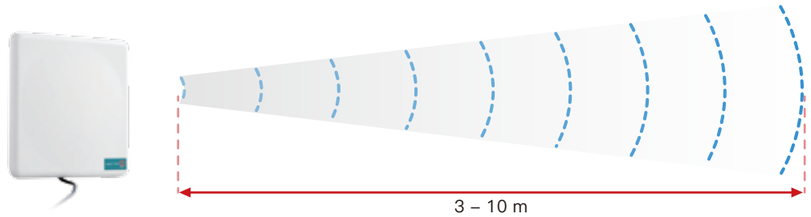
Accessory (Six-piece Set)

Installation Diagram

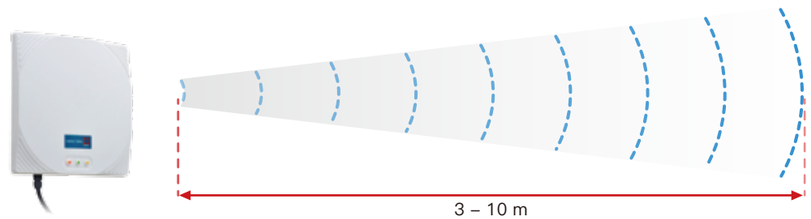
Other Series of Products (Selected by Reading Range)



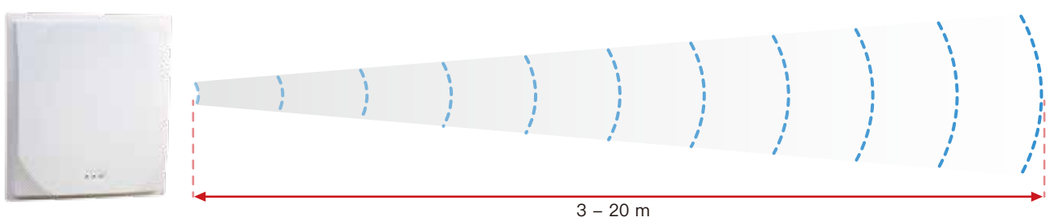
Model#：VI-83T
Dimension：217 (L) * 217 (W) * 70 (H) mm
Weight：2.5kg (package included))



Model#：VI-86
Dimension：306 (L) * 306 (W) * 25 (H) mm
Weight：2.6kg (package included)



Model#：VI-89
Dimension：260 (L) * 260 (W) * 65 (H) mm
Weight：3.0kg (package included)



Model#：VI-88T
Dimension：450 (L) * 450 (W) * 40 (H) mm
Weight：4.0kg (package included)

Guide of selecting UHF RFID Fixed Reader

RFID Fixed reader, also known as split RFID reader, the read/write part of the fixed reader is arranged separately from the RFID antenna, and the RF signal between them is connected by coaxial cable.

Advantages of RFID Fixed reader

- The control circuit and RF circuit of RFID fixed reader are more complicated, and the performance requirements for reader are high, especially the technology such as radio frequency interference cancellation and multi-tag reading anti-collision algorithm;
- The RF output power of RFID fixed reader can reach 30-33dBm. It is better than RFID integrated reader in reading distance and reading multiple tags;
- RFID fixed reader has more functions, more choices such as GPIO interface and communication interface, and it is easier to realize the integration of project system;
- The outdoor installation of RFID fixed reader needs to be equipped with a waterproof outer box. The working between the reader and the antenna needs to be connected through a coaxial feeder with good quality to ensure long-term stable operation;
- RFID fixed readers have a wider application scenario, reader can be competent for more complex work environments, for example; require fast reading, large inventory, long distance, fast speed, etc.;
- VANCH RFID fixed readers have fixed-type readers consisted of MCU micro-controller, ARM chip, linux, Android OS, Apple IOS system and other technical platforms to meet the needs of customers in all aspects.
- Vanch Fixed reader adopt carrier suppression and multi-tag anti-collision algorithm core technology functions.

Application areas of RFID fixed reader

- RFID fixed readers are commonly used in warehouse logistics, supply chain environment material inventory, inbound and outbound management, clothing, shoes and hats, jewelry retail department stores, cluster factories to terminal retail store management; also commonly used for anti-counterfeiting traceability, books and archives Management.

UHF RFID
Fixed Reader

VF-747

Classic product in RFID reader field, totally sales of more than 30 thousands units with 7 years.

VF-747 Specification

- Adopt Impinj UHF reader chip and TI ARM embedded processing chips to achieve high-speed reading and data fast operation;
- Full support to meet the EPC global UHF Class1 Gen2 / ISO 18000-6C / ISO18000-6B electronic tag standard;
- RS232, RS485 and TCP / IP network communication;
- Output power reach 32dbm, it is adjustable. Support active mode, command mode and trigger mode;
- Reading buzzer and LED status indication; support online upgrade for hardware by communication port;
- Reader supply multi I/O input output connectors, convenient for device to integrate and application;
- Highly reliable design for industrial structure to meet the demanding work environment.

UHF


IndyR2000

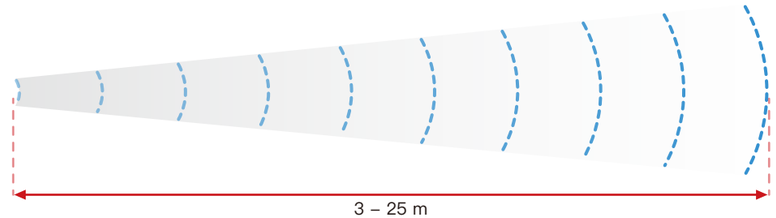

TI ARM Embedded Chip


Multigroup I/O Ports

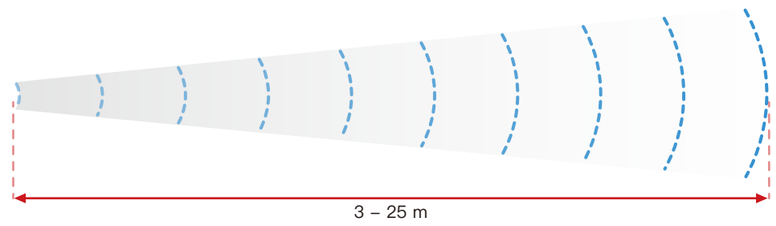
Performance Index	
Frequency range	860-868MHZ，902-928MHZ（can be customized）
Frequency modulation	FHSS or fixed-frequency, can be set by software
RF output	+10.0 to +30.5 dBm；50 ohm load
Peak inventory speed	> 500 tags/sec
Tag Buffer Size	800 tags @ 96 bit EPC
Tag RSSI	Supported
Antenna Detector	Supported
Ambient Temp Monitor	Supported
The number of antennas	1/2/4 TNC antenna connectors for selections
Communication interface	10M/100MAdaptive Ethernet、RS232、RS485、Wiegand26/34 interface
Communication rate	Serial rate 9600～115200bps，RJ45 is 10Mbps
Secure firmware upgrade	The upgrade mechanism can be extended
input / output (GPIO)	2 inputs, 1 output
Supported regions	US, Canada and other regions following FCC Europe and other regions following ETSI EN 302 208 with & without LBT regulations,Mainland China,Japan,Korea,Malaysia, Taiwan

Software Development Kit	c++ java c# c++Library cross-platform（windows/linux/osx）
WiFi	IEEE 802.11 n/b/g Optional ✓
Bluetooth	Bluetooth 4.0 Optional ✓
Reading distance	8dbi Antenna configuration, typical read range: 0 to 25 m (depends on tag)
Protocol	EPC global UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B
Mechanical electrical performance	
Dimension	200 (L) * 200 (W) * 35 (H) mm
RF Connector	TNC
Power	With 220V AC input, the output of +12 V/3A DC power converter
IP rating	IEC IP53
Operating Temp.	-20℃ to +70℃
Storage Temp.	-40℃ to 80℃
Humidity	5% to 95%, Non-condensing

Other Series of Products (Selected by External SMA antenna interface)



Model#：VF-747
Dimension：200 (L) * 200 (W) * 35 (H) mm
Weight：＜2 KG
External SMA antenna interface：4



Model#：VF-787
Dimension：200 (L) * 200 (W) * 35 (H) mm
Weight：＜2 KG
External SMA antenna interface：8

UHF RFID
Multi Ports Fixed Reader

VF-P16

More than 32 ports for RFID antennas, meet the demands of applications need multi antennas, greatly reducing the cost.

VF-P16 Specification

- Fully support compliance EPC global UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B Standard tag;
- Working frequency 860-960mhz,(can be customized);
- Support RS232,RS485, TCP/IP and wireless network communication etc;
- Output power is 30dBm can be customized, read tag peak speed > 700 piece/s;
- Support multiple work modes including active mode, command mode, trigger mode etc;
- RF adoptIndyR2000chip of American Impinj company,with high performance multi-tags recognition algorithm,its performance can compete with products imported from Europe and the United States;
- LED State indication, support firmware online update through communication interface;
- Products through the authority of domestic and foreign authority testing certification, FCC, CE, no Commission certification etc.

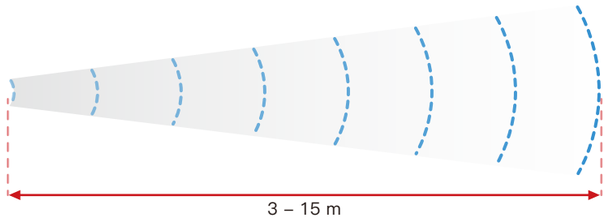
UHF | IndyR2000 | LED Lighting | TCP/IP Port

Performance index

Frequency range	860Mhz — 960Mhz
Frequency modulation	FHSS or fixed-frequency, can be set by software
RF output	10-30 dBm customized 50 ohm load
Read tag peak speed	> 700 tags/second
Tag Cache area	800 tags @ 96 bit EPC
Supported	Tag RSSI; Antenna Detector; Ambient Temp Monitor; multi-tag anti-collision algorithm
The number of antennas	16 / 32 SMA Antenna inteface
communication interface	10M/100MAdaptive Ethernet, RS232, RS485
Communication rate	Serial rate 9600～115200bps,RJ45 is 10Mbps
Secure firmware upgrade	The upgrade mechanism can be extended
Input / output (GPIO)	5 Optical isolation inputs, 5 Optical isolation output
Software Development Kit	c++ java c# c++Library cross-platform (windows/linux/osx)
Work area support	US, Canada and other regions following U.S. FCC Europe and other regions following ETSI EN 302 208 with & without LBT regulations, Mainland China, Japan Korea, Malaysia, Taiwan

Tag operation performance	
Reading range	9dbi antenna configuratio, Reading distance 3～15M (test tag Impinj E41b)
Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C, ISO18000-6B
Maximum receiver sensitivity	-82 dBm; Maximum return loss: 10 dBm
Mechanical electrical performance	
Power Supply	With 220V AC input, the output of +12 V/3A DC power converter
Humidity	5% to 95%, non-condensing
Power Consumption	Less than or equal to 15W
RF output interface	SMA connector
IP rating	IEC IP53
Operating Temp.	-20℃ to +70℃
Storage Temp.	-20℃ to 85℃
Certifications	FCC / CE

Other Series of Products (Selected by External SMA antenna interface)

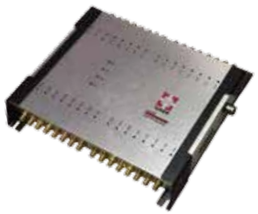


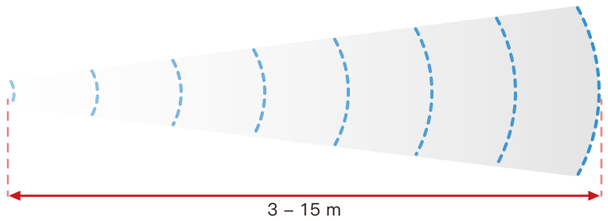
Model#：VF-P16

Dimension：215 (L) * 185 (W) * 34 (H) mm

Weight：1.5kg (package included)

External SMA antenna interface：16





Model#：VF-P32

Dimension：210 (L) * 150 (W) * 26.5 (H) mm

Weight：1.5kg (package included)

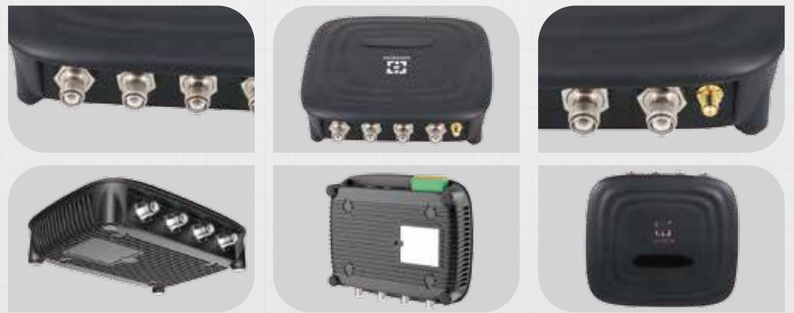
External SMA antenna interface：32

UHF RFID

IoT Android RFID Fixed Reader

VF-S108

Vanch Fixed reader adopt carrier suppression and multi-tag anti-collision algorithm core technology functions.



VF-S108 Specification

VF-S108 Internet of Things Android RFID reader, reliably work every day in the world, through wireless RF signal identification to connect to enterprise, government, commercial retail, inventory management, and asset tracking and other valuable applications, accurate and timely data collection and transmission Let the digital world of the Internet of Everything become a reality!

- Qualcomm MSM8909 chip platform, 1.8GHz quad-core A7 processor, clocked at up to 1.8GHz, using Mali-T764 GPU, supporting 4K, H.265 hard decoding;
- The RF channel uses the US Impinj indyR2000 chip and has excellent multi-tag recognition performance.
- The super-communication interface design makes the professional technology simple, no need to increase the amount of expenses, integrated Bluetooth, WiFi, 4G full Netcom.

Industrial design, full metal housing

Made of aluminum alloy, it is durable and durable for harsh environments.

Flexible and convenient communication and rich interface

RS232, USB OTG interface, 4 input and output interfaces.

Support audio and video multimedia interface

Support HDMI video output.

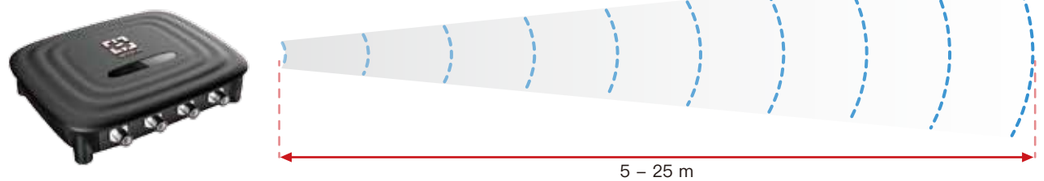
Meet the harsh environment

Adopting the perfect multi-tag anti-collision algorithm and carrier suppression core technology.

Physical parameter	
Product Size	215 (L) * 185 (W) * 34 (H) mm
Weight	1.5KG
Housing material	Die-cast aluminum alloy
Protection level	IEC IP54
Electrical parameters	
Operating system	Android 5.1/6.0/7.1
CPU processor	Qualcomm MSM8909 chip platform, 1.8GHz quad-core A7 processor

GPU graphics processor	Supports 4K, H.265 hard decoding with Mali-T764 GPU
RAM+ROM memory	LPDDR2+eMMC 2GB/4GB/16GB/32GB
Built-in storage SD	Support SD card *1, up to 128GB
USB interface	USB2.0 or higher*1, USB OTG
HDMI	Support video 1*HDMI interface (1080P)
Input voltage	DC12/3A
power	25W (RF output power 30dBm)
stand by	Ambient temperature detection; Tag RSSI; Antenna connection protection
I/O interface	4 optocoupler inputs (initial low level), 4 relay outputs (loadable DC24V/2A)
UHF RFID Parameter	
RF core chip	American British frequency Jie INDY R2000 dedicated RF chip
Air interface agreement	EPC Global UHF class1 Gen2/ISO 18000-6c/ISO 18000-6B
working frequency	902-928MHz or 865-868MHz
Output Power	20～30dBm±1dBm
Output power adjustment	1dBm step (set by VANCH software)
Reading distance	0-25 meters (related to reader parameter configuration, antenna gain, label type)
Write distance	0-10 meters (related to reader parameter configuration, antenna gain, label type)
Receiving sensitivity	＜－85dBm
Tag identification peak speed	>800 times / sec
Environmental parameters	
Operating temperature	－20°～＋85°
Storage temperature	－40°～＋85°
Environment humidity	＜95% (non-condensing state)

Tag reading range (depend on tag size)



UHF RFID
Android Fixed Reader

IndyR2000

VF-S08

VF-S08 Specification

- Fully support compliance EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B Standard tag;
- Working frequency 860-868mhz, 902-928mhz,(can be customized);
- Support RS232, RS485, TCP/IP and wireless network communication etc;
- Support 8 external SMA antenna interface;
- Output power is 30dBm can be customized, read tag peak speed > 700 piece/s;
- Support multiple work modes including active mode, command mode, trigger mode etc;
- LED State indication, support firmware online update through communication interface;
- Reader provide 2 way optical isolated input, 2 way optical isolated output I/O interface, which benefit for product application and integrated.

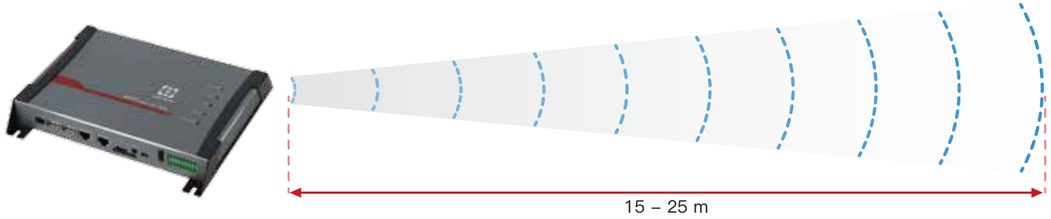
WIFI 4G HDMI IndyR2000

UHF Android High Performance RAM+ROM

Electric parameter	
OS	Android 5.1 above
CPU	RK3288 Cortex-A17 4-core processor, 1.8GHz
GPU	Mali-T764 GPU, support 4K、H.265 hard decode
RAM+ROM	LPDDR2+eMMC 2GB/4GB+8GB/16GB/32GB
Memory	Support SD card*1，128GB at max
USB interface	Support USB2.0 above versions*2 channels, USB OTG
HDMI	Support video 1*HDMI interface（4K:3840x2160）
Earphone interface	3.5mm earphone interface，built-in audio amplifier、speaker、earphone
Input voltage	DC12/3A
Power	25W（RF output power 30dBm）
Support	Ambient Temp. Detection; Tag RSSI; Antenna connect protection
WIFI	Support IEEE 802.11 n/b/g Optional ✓

GPS	Support GPS+GLONASS+Beidou Optional ✓
Bluetooth	Support Bluetooth 4.0 Optional ✓
HDMI	Support
Communication rate	Serial rate 9600～115200bps, RJ45 is 10M/100Mbps, USB2.0
input / output (GPIO)	2 inputs, 4 output
Software Development Kit	c++ java c# c++Library cross-platform (windows/linux/osx)
Supported regions	US, Canada and other regions following U.S. FCC Europe and other regions following ETSI EN 302 208 with & without LBT regulations, Mainland China, Japan Korea, Malaysia, Taiwan
UHF RFID parameter	
Reading distance	9dbi Antenna configuration, typical read range: 15 to 25 m (depends on tag)
Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B
Receive sensitivity	< -85dBm
Physical Parameter	
Dimension	210 (L) * 185 (W) * 30 (H) mm
Power	With 220V AC input, the output of +12 V/3A DC power converter
RF Connector	SMA
Weight	1.5 kg
Humidity	5% to 95% (non-condensing)
IP rating	IEC IP53
Operating Temp.	-20℃ to +70℃
Storage Temp.	-20℃ to 85℃
Housing material	Aluminium alloy

Tag reading range (depend on tag size)



UHF RFID
Linux OS RFID Fixed Reader

VF-987

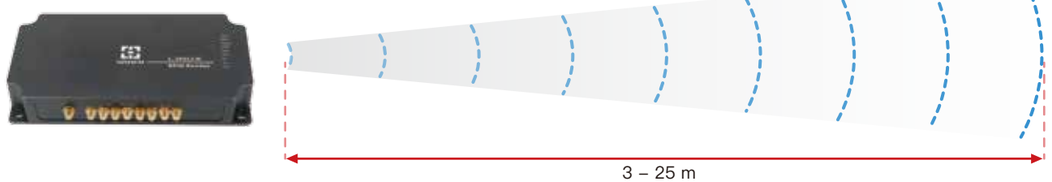
VF-987 Specification

- Support EPC global UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B standard rfid tags;
- Working frequency 860-868MHZ, 902-928MHZ(Can be adjusted according to the requirements of different countries or regions);
- Support RS232, RS485, TCP/IP and wireless communication ways;
- Support 8 external SMA antenna interface;
- Output power up to 33dbm(Adjustable), inventory tags peak velocity > 700 PCS/SEC;
- Support active ,command and trigger a variety of work modes;
- Reading buzzer and LED status indicator; Support online upgrade firmware through communication interface;
- Reader provide 4 road light isolated input, 4 road light output I/O interface, convenient for application integration;

Performance Index	
Frequency range	860Mhz — 960Mhz (Can be adjusted according to different countries or regions)
Frequency modulation	FHSS or fixed-frequency, can be set by software
RF output	20 to +30 dBm; 50 ohm load
Peak inventory speed	> 700 tags/sec
Tag Buffer Size	800 tags @ 96 bit EPC
Tag RSSI	Supported
Antenna Detector	Supported
Ambient Temp Monitor	Supported
The number of antennas	8 SMA Antenna inteface
Communication interface	RS232, RS485, TCP/IP interface
Communication rate	Serial rate 9600~115200bps, RJ45 is 10Mbps
Communication interface option	Wiegand34, 26, CAN,WIFI, Bluetooth, 4G
Secure firmware upgrade	The upgrade mechanism can be extended

CPU processor	Adopt ATMEL AT91SAM9260 CPU, ARM926EJ-S processor;
Support operating system	Linux2.6.30
Communication rate	Serial rate 9600~115200bps, RJ45 is 10/100Mbps
Storage unit	16MB SDRAM,FLASH storage,128M*8bits Nand Flash (K9F1G08U0B)
input / output (GPIO)	4 inputs, 4 output
Software Development Kit	c++ java c# c++Library cross-platform (windows/linux/osx)
Supported regions	US, Canada and other regions following U.S. FCC Europe and other regions following ETSI EN 302 208 with & without LBT regulations, Mainland China, Japan Korea, Malaysia, Taiwan
Tag Operation Performance	
Reading distance	9dbi Antenna configuration, typical read range: 3 to 25 m (depends on tag)
Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C, ISO18000-6B
Maximum receiver sensitivity	-82 dBm; Maximum return loss: 10 DBm
Mechanical electrical performance	
Dimension	205 (L) * 100 (W) * 33 (H) mm
Power	With 220V AC input, the output of +12 V/3A DC power converter
RF Connector	SMA
Weight	1.5 KG
Humidity	5% to 95%, Non-condensing
IP rating	IEC IP53
Operating Temp.	-20℃ to +70℃
Storage Temp.	-20℃ to 85℃
Certification	FCC, CE

Tag reading range (depend on tag size)



UHF RFID

X serial RFID Fixed Reader

VF-946

RFID fixed reader with high cost-effective.






VF-946 Specification

- Support EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B standard electronic tags;
- Working frequency 860-868MHZ, 902-928MHZ(adjustable according to different countries/regions);
- Support RS232、RS485 、TCP-IP, WIFI/GPRS is optional;
- Support 1, 2, 4 external TNC antenna port;
- Output RF power up to 30dbm(Adjustable), tag inventory peak velocity > 700 tags/sec;
- Support auto/command/trigger work modes;
- With reading buzzer and LED status indicator; Support online upgrade firmware via communication interface;
- 2-channel light-isolated input and 2-channel light-isolated output I/O interface, convenient for application integration;
- Low power consumption and low voltage design, guarantee the products safe and stable operation for a long time;

UHF | IndyR2000 | LED indicator | Network interface

Low power, low voltage design ideas

Ensure long-term safe and stable operation of the product without failure.

Easy for product application integration

The reader provides 2 optically isolated inputs and 2 optically isolated output I/O interfaces.

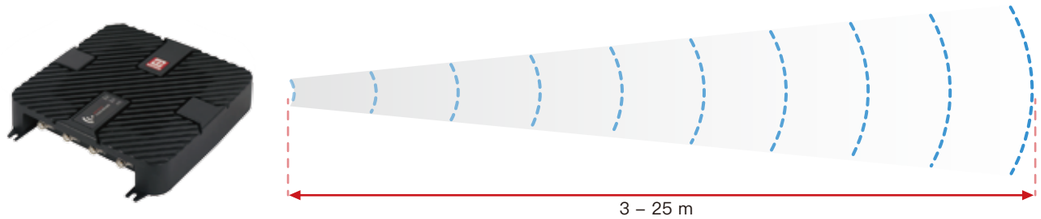
Work normal for long term

Software intelligently detect operation status, 24 hours X 365 days run without crash.

Performance Index	
Frequency range	860Mhz — 960Mhz (Can be adjusted according to different countries or regions)
Frequency modulation	FHSS or fixed-frequency, can be set by software
RF output	20-30dBm; 50 ohm load
Peak inventory speed	> 700 tags/sec
Tag Buffer Size	800 tags @ 96 bit EPC
Tag RSSI	Supported
Antenna Detector	Supported
Ambient Temp Monitor	Supported
The number of antennas	1 / 2 / 4 TNC antenna connectors for option

Communication interface	10M/100MAdaptive Ethernet、RS232、RS485、Wiegand26/34 interface
Communication rate	Serial rate 9600～115200bps, RJ45 is 10Mbps
Secure firmware upgrade	The upgrade mechanism can be extended
input / output (GPIO)	2 inputs, 2 output
Software Development Kit	c++ java c# c++Library cross-platform (windows/linux/osx)
Supported regions	US, Canada and other regions following U.S. FCC Europe and other regions following ETSI EN 302 208 with & without LBT regulations, Mainland China, Japan Korea, Malaysia, Taiwan
Tag Operation Performance	
Reading distance	9dbi Antenna configuration, typical read range: 3 to 25 m (depends on tag)
Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B
Maximum receiver sensitivity	-82 dBm; Maximum return loss: 10 DBm
Mechanical electrical performance	
Dimension	235 (L) * 211 (W) * 40 (H) mm
Power	With 220V AC input, the output of +12 V/3A DC power converter
RF Connector	TNC
Weight	2.5 KG
Humidity	5% to 95%, Non-condensing
IP rating	IEC IP53
Operating Temp.	-20℃ to +70℃
Storage Temp.	-20℃ to 85℃
Certification	FCC, CE

Tag reading range (depend on tag size)



UHF RFID
X serial RFID Fixed Reader

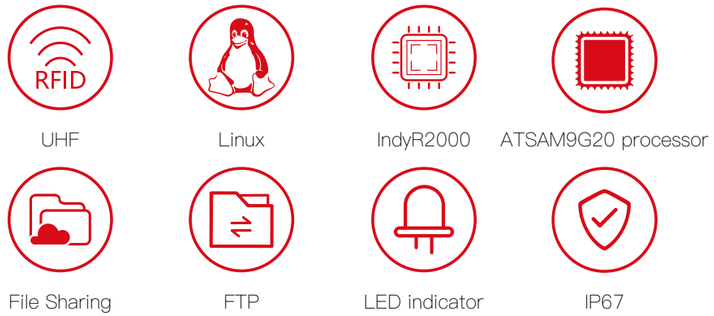
VX-647P

Flexible use of Raspberry Pi (Raspberry Pi) or Arduino (Adino)

Integrated RFID system to meet your project needs

VX-647P Specification

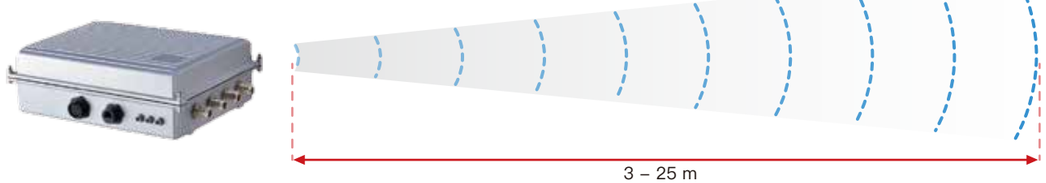
- Adopt Impinj UHF reader chip and TI ARM embedded processing chips to achieve high-speed reading and data fast operation;
- Full support to meet the EPC global UHF Class1 Gen2 / ISO 18000-6C / ISO18000-6B electronic tag standard;
- Operating frequency is between 860-868MHz / 902- 928MHZ (can be adjusted according to different countries or regions);
- RS232, RS485 and TCP / IP communication;
- Output power reach 32dbm, it is adjustable. Support active mode, command mode and trigger mode;
- Support 1, 2, 4 external SMA antenna connections;
- Reading buzzer and LED status indication; support online upgrade for hardware by communication port;
- Reader supply multi I/O input output connectors, convenient for device to integrate and application;



Performance Index	
OS	LINUX2.6
CPU	ATSAM9G20
RAM	SDRAM 64M, NandFlash 128M
Frequency range	860Mhz — 960Mhz
Frequency modulation	FHSS or fixed-frequency, can be set by software
RF output	20-30 dBm；50 ohm load
Peak inventory speed	> 500 tags/sec
Tag Buffer Size	800 tags @ 96 bit EPC
Tag RSSI	Supported
Antenna Detector	Supported
Ambient Temp Monitor	Supported
he number of antennas	1 / 2 /4 TNC antenna connectors for option

Communication interface	10M/100MAdaptive Ethernet、RS232、RS485、Wiegand26/34 interface
Communication rate	Serial rate 9600～115200bps, RJ45 is 10Mbps
Secure firmware upgrade	The upgrade mechanism can be extended
input / output (GPIO)	2 inputs, 1 output
Software Development Kit	c++ java c# c++Library cross-platform (windows/linux/osx)
Supported regions	US, Canada and other regions following U.S. FCC Europe and other regions following ETSI EN 302 208 with & without LBT regulations, Mainland China, Japan Korea, Malaysia, Taiwan
Tag Operation Performance	
Reading distance	8dbi Antenna configuration, typical read range: 3 to 25 m (depends on tag)
Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B
Maximum receiver sensitivity	-82 dBm; Maximum return loss: 10 dbm
Mechanical electrical performance	
Dimension	256 (L) * 200 (W) * 86 (H) mm
Material	Pressure casting aluminum alloy
Power	With 220V AC input, the output of +12 V/3A DC power converter/ PoE (option)
RF Connector	TNC
Weight	＜3KG
Humidity	5% to 95%, Non-condensing
IP Rating	IEC IP67
Operating Temp.	-20℃ to +70℃
Storage Temp.	-40℃ to 80℃
Certification	FCC, CE

Tag reading range (depend on tag size)



UHF RFID
Industrial reader

VI–IR610

VI–IR610 Specification

- Fully support the tags of EPC global Class 1 Gen / 2 ISO 18000–6C standard;
- Frequency range 860–868MHZ, 902–928MHZ (can be customized);
- Support RS232, RS485; optional access gateway adapter: achieve industrial Ethernet, ProfiNet;
- RF output power can be adjusted; the distance can be set among 30cm–200cm;
- Support active mode, command mode, triggers mode, etc.
- Read card beep and LED status indication; support for online upgrade of firmware via communication interface;
- It's ideal equipment selection for industrial production line;
- Software intelligent monitoring of the working state, 24 hours X running for 365 days does not crash;
- Products through the authority of the domestic and international testing institutions certification FCC, CE, no certifi–cation, etc.

The shape is adopt by industrial design, sturdy and durable, meet the hard industrial lines circumstance

Anti–electromagnetic interference	Anti–dust	Waterproof	Anti–tamper	Shockproof

Independent intellectual property R&D chip

RF adopts independent intellectual property R&D chip, equipped with high performance tag recognition algorithm, performance is comparable to European and American products.

Standard interface

Standard interface with RS232, RS485; optional connection with network gateway adapter to realize industrial Ethernet and ProfiNet.

Work normal for long term

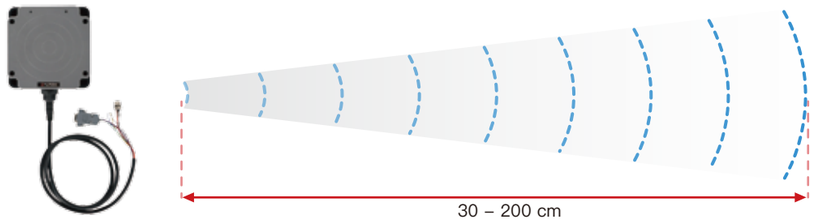
Software intelligently detect operation status, 24 hours X 365 days run without crash.

Performance Index

RF chip	PR9200 chip
Frequency range	865Mhz — 868Mhz; 902–928MHz (or customized)
FM mode	FHSS or fixed frequency, set by the software
Internal antenna	3dbi Circularly polarized antenna
Air interface protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000–6C

input / output（GPIO）	Photoelectric isolation 1 input, 1 output;
Communication rate	Rate 9600～115200bps
Status display mode	LED indicator light, buzzer
CPU	ARM（STM32F107）
Standard interface	RS232, RS485
Industrial rfid reader	modbus RTU Optional ✓
Communication rate	Rate 9600～115200bps
Application software interface	Provide API development kit and application routines
Software Development Kit	c++ java c# c++Library cross-platform（windows/linux/osx）
Tag operating performance	
Read distance	The distance can be set among 30cm-200cm (related to label performance)
Maximum receiving sensitivity	-80 dBm; Maximum return loss: 10 Dbm
Air interface protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B
Mechanical and electrical properties	
Dimension	95 (L) * 95 (W) * 40 (H) mm
Connector type	Round waterproof M10 pin socket
Packing weight	4500g
Installtion method	Metal bracket, reading angle adjustable
Humidity	5% to 95%, non-condensing
Protection grade	IEC IP67
Operating Temp.	-20°～+70°
Storage Temp.	-40°～+85°

Tag reading range （And tag performance is related to antenna gain and size)



UHF RFID
Desktop Reader

VD-67/68

Specification

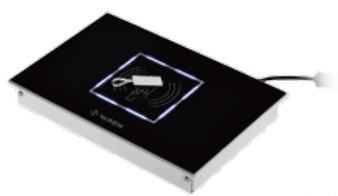
- Frequency range: 902–928MHZ (or customized);
- Support ISO–18000–6B, ISO–18000–6C (EPC G2), TK900 Protocol;
- Support LAN and serial port communication interface, the parameter can be customized;

VD–67 Specification

Model#	VD–67
Frequency range	902–928MHZ (or customized)
FM mode	FHSS or fixed frequency, set by the software
Antenna connection qty'	Built–in 1 antenna
Communication interface	USB
Application software	Provide with DLL, support secondary development
Reading distance	Read>100mm, Write>50mm
Air interface	ISO–18000–6B、ISO–18000–6C (EPC G2)
Dimension	139 (L) * 86 (W) * 22 (H) mm
Power supply	USB
Weight	120 g
Humidity	5% to 95%, non–condensing
Protection grade	IEC IP52
Operation Temp.	–20℃ to 60℃
Storage Temp.	–40℃ to 80℃

VD–68 Specification

Model#	VD–68
Frequency range	902–928MHZ (or customized)
FM mode	FHSS or fixed frequency, set by the software
Quantity of antenna	Dual feed point ceramic antenna
Communication interface	10M/100M enthernet 、RS232、RS485、 Weigand 26
SDK interface	Provide dynamic link library (DLL), support the secondary development
Reading distance	output 20 dBm， Reading distance 10–15cm±5
Air interface protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000–6C / ISO18000–6B
Dimension	200 (L) * 135 (W) * 28 (H) mm
Power	DC9V/3A Adapter
Weight	900g
Humidity	5% to 95%, non–condensing
Protection grade	IEC IP52
Operation Temp.	–20℃ to 60℃
Storage Temp.	–40℃ to 80℃



UHF RFID Channel reader

VC–420T/420TP






VC–420T Specification

- Support tags conforming to standards EPC global UHF ISO–18000–6C (EPC G2), TK900;
- Frequency range 902~928MHZ(or customized);
- Support multi communication interfaces (LAN, RS232, RS485, Wiegand26/34);
- 4 SMA antenna ports, 7dbi circular polarization antenna, the height of antenna adjustable;
- RF output power 20 ～ 30dBm adjustable, support auto, command, trigger work modes;
- Reliable industry structure design, workable in varied severe environment;
- Based on independent intellectual property development, adapt reader to work with global frequency range.

RFID gate reader is combined by RFID antennas, reader, EAS sound and light alarm system, power supply and other assistant equipments. When goods or person attached with RFID tag go through the channel, RFID antenna will read the information and real time send to reader and related processor, to achieve the goods or person management.

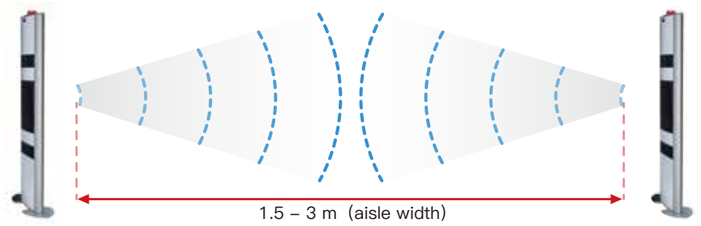
Application: warehouse assets management, meeting attendance, clothes industry, books and files industry, manu–facturing control and other open fields with big flows.

UHF WIFI 4G Infrared trigger AFI, EAS alarm mode

Performance Index	
Frequency range	902–928MHZ (or customized)
FM mode	FHSS or fixed frequency, set by the software
RF output	20–30dBm adjustable
Antenna connection qty’	4 SMA antenna ports, 7dbi circular polarization antenna,
Communication rate	Serial port 9600～115200bps, RJ45 10Mbps
Power dissipation	Average<20W
EAS alarm	3s sound and light prompt
GP I/O interface	12 pin + 4 pin
Reliable firmware upgrade	Extensible upgrade mechanism
Communication interface	LAN、RS232、RS485、Wiegand26/34
Software Development Kit	c++ java c# c++Library cross–platform (windows/linux/osx)
Tag Operation Performance	
Reading distance	1.5–3m equipped with 7dbi antenna (tag dependent)

Air interface	EPCglobal UHF ISO–18000–6C (EPC G2) 、TK900
Mechanical electrical performance	
Dimension	157 (L) x 44.5 (W) x 13 (H) cm
Housing material	Aluminum profile + flame retardant PVC
Color	Milky white with black
Weight	36kg / 40kg
Power supply	with 220V AC input
Humidity	5% to 95%, non–condensing
Protection grade	IEC IP53
Operating Temp.	–20℃ to 60℃
Storage Temp.	–40℃ to 80℃

Other series of products (can be purchased according to the following different parameters)

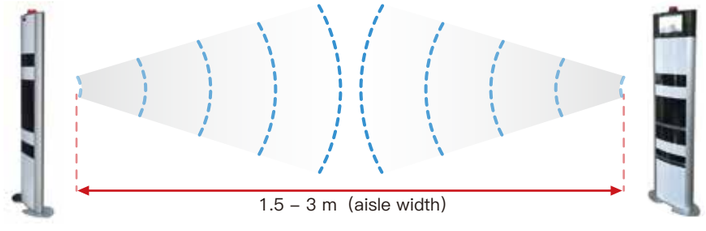


Model#：VC–420T

Dimension：157 (L) x 44.5 (W) x 13 (H) cm

Weight：36 KG

No embedded high–definition 10–inch Android display system



Model#：VC–420TP

Dimension：157 (L) x 44.5 (W) x 13 (H) cm

Weight：40 KG

Built–in high–definition 10–inch Android display system for personalized visualization

UHF RFID Module

VM-5AG/5F/61/64/68

Ideal for handheld, desktop, and integrated RFID readers.





Specification

- **Integrated antenna character**
  1. Be sensitive and stable to the tags identify;
  2. Stable reading distance 2–3 meters;
  3. Multi–tags identify, >50pcs tags;
  4. Reading distance speed, >50pcs/sec.

- **Outstanding stability**
  1. 24 hours x 365days work normally;
  2. Appearance little influenced by cover, electromagnetic environment etc;
  3. Wide temperature design and the temperature drift coefficient.

- **Solve the exothermic problem completely**
  1. No need for connecting any other outer radiating device.
  2. Sustain electricity<200mA @ 3.5V (26 dBm Output). Pulse peak current<260mA.

- **Good consistency**
  1. Good design in consistency. Choose the top level components to keep each parameters table and consistence.

▲ VM – 5GA

▲ VM – 5F

VM–5GA Specification	
Model#	VM–5GA
Working Voltage	DC 3.5V — 5 V
Pcb size	50 * 50mm
Ceramic antenna size	40 * 40mm
Overall height	8.5mm
Standby current	＜ 80mA (EN pin high level)
Sleeping current	＜ 100uA (EN pin low level)
Operation current	180mA @ 3.5V (26 dBm Output, 25℃)。 110mA @ 3.5V (18 dBm Output, 25℃)。
Operating time	<100mS。
Operation temp.	– 20 ℃ – + 70 ℃
Storage temp.	– 20 ℃ – + 85 ℃
Working humidity	< 95% (+ 25 ℃)
Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000–6C
Frequency	840–960MHZ
Output power	18–26 dBm
Read	200–250cm
write	10–50cm
Receive sensitivity	＜ –70 dBm
Store tag peak speed	> 50pcs/sec
Tags storage capacity	200pcs tags @ 96 bit EPC
Tags RSSI	support
Communication interface	TTL Uart interface
Communication baud rate	115200 bps 、38400 bps
Heat–dissipating method	Air cooling

VM–5F Specification	
Model#	VM–5F
working frequency	865–868MHZ, 902–928MHZ
Maximum output powe	18–26 dBm
Output power accuracy	+/– 1dB
Communication interface	TTL Uart interface Wiegand26/ 34 interface
GPIO	2–channel input 2–channel output
Communication baud rate	115200 bps 、38400 bps
write	>20cm
Read	>150cm
Protocol	EPCglobal UHF Class 1 Gen 2/ ISO–18000–6C
Store tag peak speed	> 50pcs/sec
Label buffer	200pcs label @ 96 bit EPC
Tag RSSI	support
work voltage	DC 3.5V — 5 V
Standby current	<80mA (EN high level)
Sleep current	<100uA (EN low level)
Operating Current	260mA @ 3.5V (26 dBm Output, 25℃) 110mA @ 3.5V (18 dBm Output, 25℃)
start–up time	<100mS
Operating Temp	– 20 ℃ – + 70 ℃
Storage Temp	– 20 ℃ – + 85 ℃
heat dissipation method	Air cooling

Specification

- Adopt high performance Impinj UHF Reader chip IndyR2000;
- Small dimension, low power, convenient to integrate into internal of handheld reader.

▲ VM – 61

▲ VM – 64

▲ VM – 68

Specification

Model#	VM-61	VM-64	VM-68
Length (PCB length)	55.5 mm	67 mm	67 mm
Operating Temp.	-20℃ – + 60℃		
Storage Temp.	-20℃ – + 85℃		
Operating Humidity	<95% (+25℃)		
MMCX connector			
SMA connector			
Protocol	EPCglobal UHF Class 1 Gen 2 / IOS 18000-6C		
Frequency	860 Mhz ~ 960 Mhz		
Voltage	3.7V~5.25VDC		
Operating Current	1.1 A	1.2 A	1.3 A
Standby current	50 mA	60 mA	70 mA

Connector PIN definition

Connector Model: Molex 53261-1571

PIN	Definition	Description
1	GDN	Grounding at the same time
2	GDN	Grounding at the same time
3	3.7V – 5V DC	Connect to power at the same time
4	3.7V – 5V DC	Connect to power at the same time
5	GPIO 1	Universal IO interface
6	GPIO 2	Universal IO interface
7	GPIO 3	Universal IO interface

PIN	Definition	Description
8	GPIO 4/5	Universal IO interface
9	Buzzer	driven
10	UART_RXD	TTL Level
11	UART_TXD	TTL Level
12	USB_DM	USB interface
13	USB_DP	USB interface
14	EN	High TTL Level enabled module

UHF

RFID Handheld Reader Series

From complicated to simple

Cost-effective, simple and practical, to meet your mobile data collection requirements.

UHF RFID
Bluetooth handheld reader

RFID
UHF

Bluetooth

VH-75/75T

Fast and effcient software integration

Provide development files and application demonstration software based on Android and Apple iOS platform
DLL development file
SDK development file
Application Demo Software

Meet the instructions in various working environments

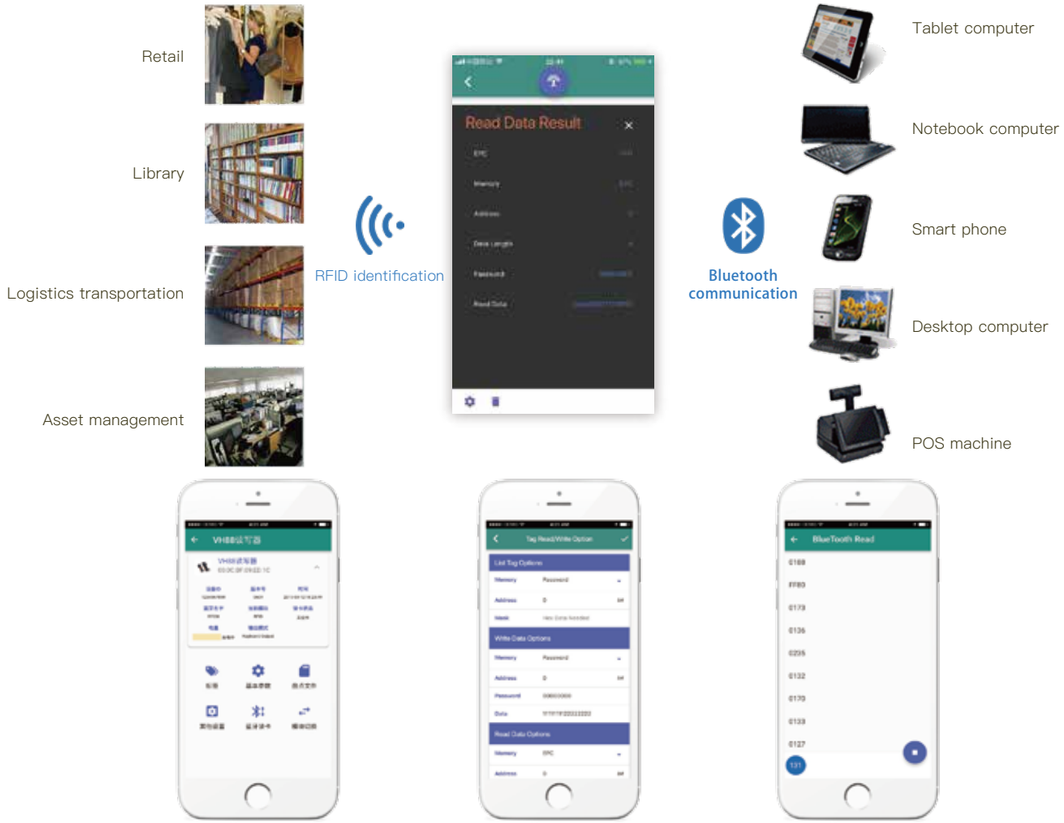
LED indicator
Vibration motor
Buzzer






VH-75/75T Specification

- Connected with your PDA, smart phone, tablet computer by Bluetooth,convenient and save your cost;
- Reading/Writing under protocols of ISO-18000-6B、ISO-18000-6C（EPC G2）;
- Provide demo software and SDK based Android/iOS platform system.
- Reliable designation of industrial structure, applicable for tough working environments.



Performance Index

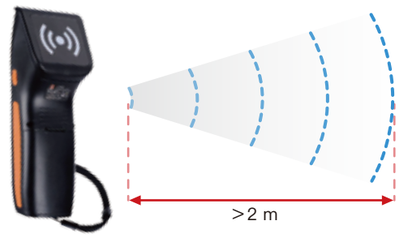
RFID module	VANCH VM-5GA
Frequency range	865-868MHZ，902-928MHZ(Adjustable)
Antenna gain	2dbi Circular polarization antenna
Air-interface protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C
RF output	18~26 dBm (adjustable)
Output power adjustment	1dBm (set by Vanch software)
Reading distance	Reading distance 2～2.5M (test tag Impinj E41b) ; writing distance>20cm

Multiple tag reading rate	＞50pieces/second （peak）
CPU control chip	ARM （STM32F103）
Storage space	2Gb(NandFlash)
USB	Micro-B，USB2.0
Bluetooth	Bluetooth 4.0
Communication rate	Serial rate 9600～115200bps
Software Development Kit	Provide demo software and API based Android/iOS platform system.
Reading Indication	Buzzer, vibration, LED
Standby time	150 h
Power	Rechargeable lithium battery （3.7V,3200mAH）
Dimension	180 (L) * 65 (W) * 65 (H) mm
Weight	250g
Ingress Protection	IEC IP64
Working Temperature	-20℃ to +60℃
Storage Temperature	-25℃ to 70℃

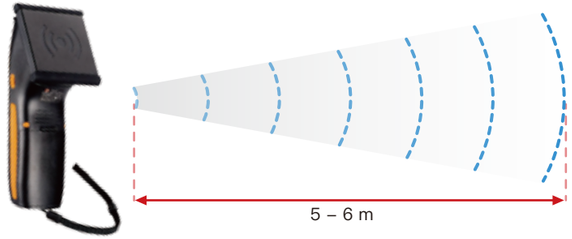
Accessory (three-piece Set)



Other Series of Products (Selected by Reading Range)



Model#：VH-75
Dimension：180 (L) x 65 (W) x 65 (H) mm
Weight：250g



Model#：VH-75T
Dimension：180 (L) x 65 (W) x 65 (H) mm
Weight：250g

UHF RFID
Bluetooth Back clip reader

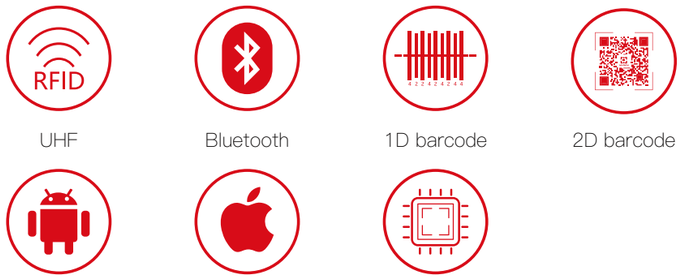
VH-76

VH–76 Product Introduction

The VH–76 is an innovative UHF back clip reader. The UHF back clip reader uses low–power high–speed Bluetooth 4.0 to communicate with a smart phone. It can be used as a host with Android or Apple IOS smart devices. The device also incorporates ID or 2D scanning capabilities, and the product can meet the needs of various applications to a greater extent.

VH–76 Specification

- Bluetooth communication and online use of existing smartphones reduce project implementation costs;
- Support ISO–18000–6C (EPC G2) protocol UHF electronic tag reading and writing, reading distance up to 7m (reference to AZ9662 tag);
- Easily confirm the reading of the label while easily checking it on the phone display;
- A variety of prompts for reading status (LED indicator, buzzer);
- Removable 6000mAh polymer lithium battery;
- Provide application demo software and SDK development files for Android and Apple IOS operating system.



UHF Bluetooth 1D barcode 2D barcode

Suitable for Android Suitable for Iphone Impinj Indy R2000

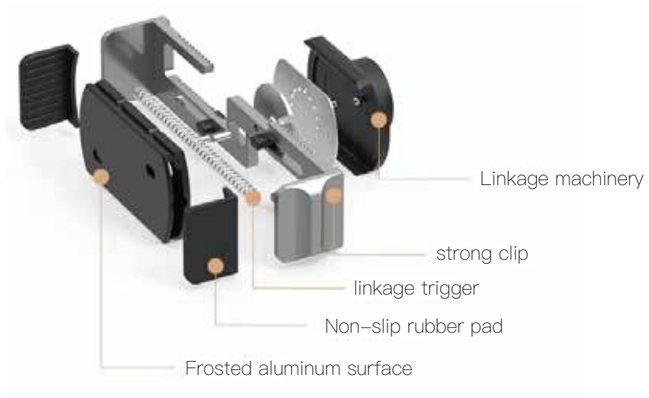
Data collection	
RFID module	VANCH VM–61，based on Impinj Indy R2000
Frequency Range	865–868MHZ，902–928MHZ(can be adjusted depending on the country or region)
Air interface protocol	ISO–18000–6C (EPC GLOBAL CLASS 1 Generation2)
Frequency modulation	FHSS or fixed–frequency, can be set by software
Output Power	20~33 dBm adjustable (1dBm step adjustable)
Bar code matching	One–dimensional 1D Zebra SE965 / Honeywell N4313 Code 39、Code 93、Code128、Codebar、EAN– 13、EAN– 8、UPC–A、UPC– E 、ITF–14、UCC/EAN– 128、Matrix 25、EAN–128、ISBN etc. Two–dimensional 2D Zebra: SE4710 / SE4750 / SE4750MR; Honeywell: N6603 PDF417、MicroPDF417、Composite、RSS、TLC–39、Datamatrix、QR code、Micro QR code、 Aztec、MaxiCode、Postal Codes、US PostNet、US Plane、UK Postal、Australian Postal、Japan Postal、Dutch Postal etc.

Reading distance	MAX. Reading distance>6m， MAX .Write distance>2m
Antenna	High gain ceramic antenna
Communication function	
Bluetooth	Bluetooth 4.0
USB	USB2.0
Electrical parameters	
Display	Android or IOS operating system(4.0–6.0 inch screen optional)
Button	Scan button, power button 2 pcs
Tag ID storage(NAND FLSAH)	128M
Tag read prompt	Buzzer、LED、Mobile phone display software
Battery	6000mAh lithium battery (for more than 12 hours of continuous operation)
Charger	Input power：AC100～240V, 50～60HZ,0.35A Output power：USB DC 5.0V， 2.0A/ buffer 3 hours
Charger clip	Optional
Physical parameter	
Shell material	ABS、Mobile phone bracket aviation aluminum
Size	248 (L) * 75 (W) * 70 (H) mm
Weight	Up to 350g (with battery)
Use environment	
Humidity	5% to 95%, Non–condensing
Protection level	IEC IP65
Operating temperature	–20 ℃ to +70℃
Storage temperature	–25℃ to + 75℃

Mechanical self–locking

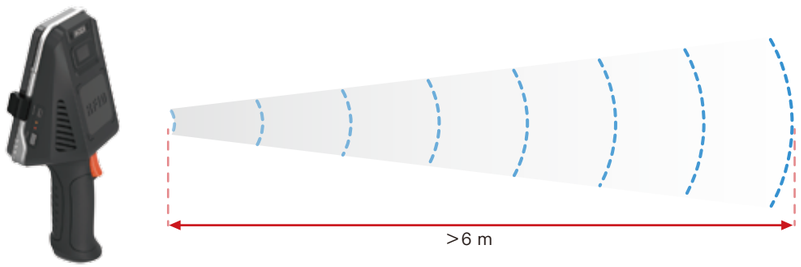
Applicable to mobile phone screen (4.0 – 6.0 inch screen optional)

Internal structure



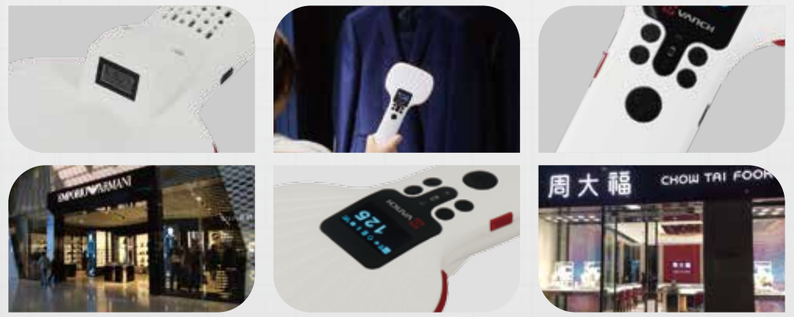
Accessories (three sets)

Tag reading distance (refer to AZ9662 tag)



UHF RFID
Bluetooth bat reader

VH-88



VH-88 Specification

- Bluetooth communicated with existing PDA, mobile, tablet to save application cost;
- Support ISO-18000-6C (EPC G2) protocol uhf rfid tag;
- 4-5m reading range based on inlay AZ9662;
- Muti-working status indications(LCD, Vibration motor, LED, buzzer);
- Built with PCB antenna to reduce weight of reader;
- Provide demo software and SDK based Android/iOS platform system.

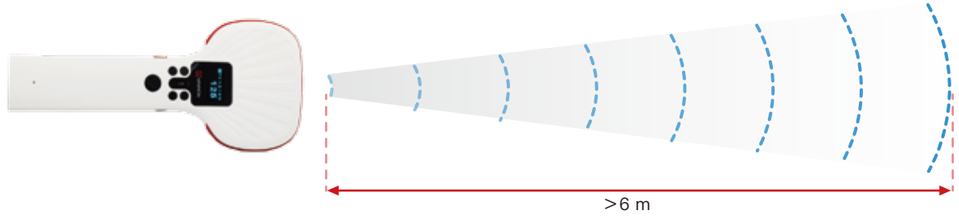
UHF Bluetooth 1D barcode 2D barcode

Data Collection	
RFID module	VANCH VM-61, Impinj indy R2000 chip
Frequency	865-868MHZ,902-928MHZ (customized optional)
Protocol	ISO-18000-6C (EPC GLOBAL CLASS 1 Generation2) ISO-18000-6B
FM mode	Wide spectrum FM (FHSS) or fixed frequency set by software
RF output	20~33dBm adjustable
Read range	Max. Read >6m, Max. Write >2m (refer to AZ9662 tag)
Antenna	High gain PCB antenna
Option function	1D barcode scanner Zebra SE965 / Honeywell N4313 Code 39,Code 93, Code128,Codebar, EAN- 13,EAN- 8,UPC-A,UPCE, ITF-14,UCC/EAN- 128,Matrix 25,EAN-128,ISBN etc. 2D barcode scanner Zebra: SE4710 / SE4750 / SE4750MR; Honeywell: N6603 PDF417,MicroPDF417,Composite,RSS,TLC-39,Datamatrix,QR code,Micro QR code, Aztec,MaxiCode,Postal Codes,US PostNet,US Plane,UK Postal,Australian Postal,Japan Postal,Dutch Postal
Communication Function	
Bluetooth	Bluetooth 4.0
USB	USB2.0
Electrical performance	
CPU	MCU SMT32F103

Display Screen	1.3 inch white OLED
Keys	6 keys including scan, power, manual etc.
Tag ID storage (SRAM)	21845 data caches
Tag ID storage(NAND FLASH)	128M
Read Indicator	Buzzer, OLED, LED
Battery	18650 lithium battery (3.6V,3000mAH, work for 3 hours full charged)
Power supply	Input: AC100~240V, 50~60HZ,0.35A Output: USB DC 5.0V, 2.0A
Desktop Charger	Optional
Mechanical parameter	
Shell material	ABS+Silicon
Dimension	270 (L) *124 (W) * 35 (H) mm
Net Weight	240g(including battery)
Work Environment	
Humility	5% to 95%, non-condensing
IP Grade	IEC IP65
Working Temp.	-20 °C to +70°C
Storage Temp.	-25°C to + 75°C

Accessory (Four-piece Set)

Tag reading distance (refer to AZ9662 tag)



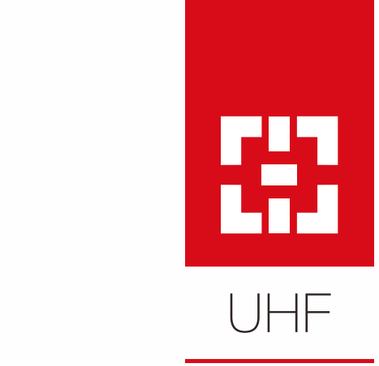
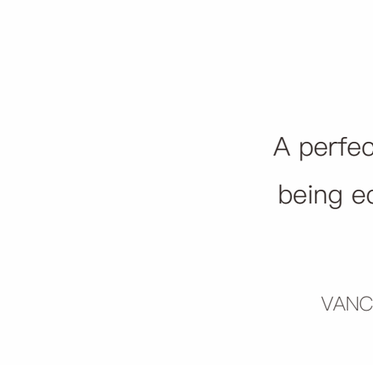
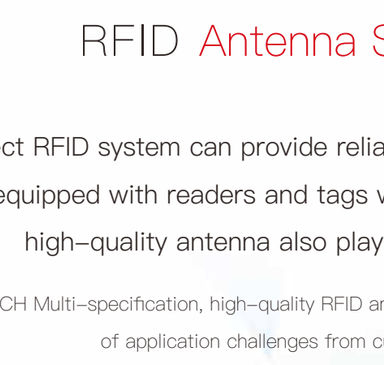
UHF

RFID Antenna Series

A perfect RFID system can provide reliable data, In addition to being equipped with readers and tags with high performance, high-quality antenna also play a pivotal role.

VANCH Multi-specification, high-quality RFID antenna can solve a variety of application challenges from customers.

- Optimize application read distance;
- Optimize application of beamwidth;
- Adapt to all-weather environmental applications.

Ceramic antenna

Image	Model#	Frequency	Gain	Polarization	IP Rating	Dimension	Weight	Connector
	VA-91A Embedded antenna	915MHz(US) 868MHz(EU)	2 dBi	Doubly-fed circular polarization	IP 60	antenna: 40*40 PCB: 50*50	0.06	SAM antenna interface or custom
	VA-91C Ceramic Antenna	915MHz(US) 868MHz(EU)	4 dBi	Doubly-fed circular polarization	IP 60	antenna: 60*60 PCB: 70*70	0.08	SAM antenna interface or custom

Flat Antenna

Image	Model#	Frequency	Gain	Polarization	IP Rating	Dimension	Weight	Connector
	VA-2926 Near Field Antenna	902-928MHz	5 dBi	Linear polarization	IP 67	295*262*15	0.5	SMA-female
	VA-97 Asset tracking Antenna	860—960MHZ	7 dBi	Linear polarization circular polarization (optional)	IP 65	210*180*45	0.8	SAM antenna interface or custom
	VA-993R Asset Management Antenna	915MHz(US) 868MHz(EU)	9 dBi	Circular polarization	IP 67	260*260*40	1.95	SAM antenna interface or custom
	VA-99 Antenna	915MHz(US) 868MHz(EU)	9 dBi	Linear polarization circular polarization (optional)	IP 65	250*220*60	1	N-female antennas connector or can be customized
	VA-D992R Antenna	915MHz(US) 868MHz(EU)	9 dBi	Vertical polarization	IP 67	306*306*25	1.4 (With clamp)	N-female antennas connector or can be customized
	VA-910 Antenna	902-928MHZ	10 dBi	Linear polarization	IP 67	700*150*90	4.5	N female antennas connector or can be customized
	VA-94R Flat Antenna Circular	902-928MHz	4 dBi	Circular polarization	IP65	160*160*20	0.2	N Female

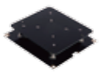
	VA-912R Antenna	902-928MHZ	12 dBi	Circular polarization	IP 65	450*450*40	4.5	N Female
	VA-9121 Antenna	902-928MHZ	12 dBi	Vertical polarization	IP 67	610*310*70	5.2	N Female
	VA-915H Antenna	870-960MHZ	15 dBi	Vertical polarization	IP 67	1270*280*120	9	N Female

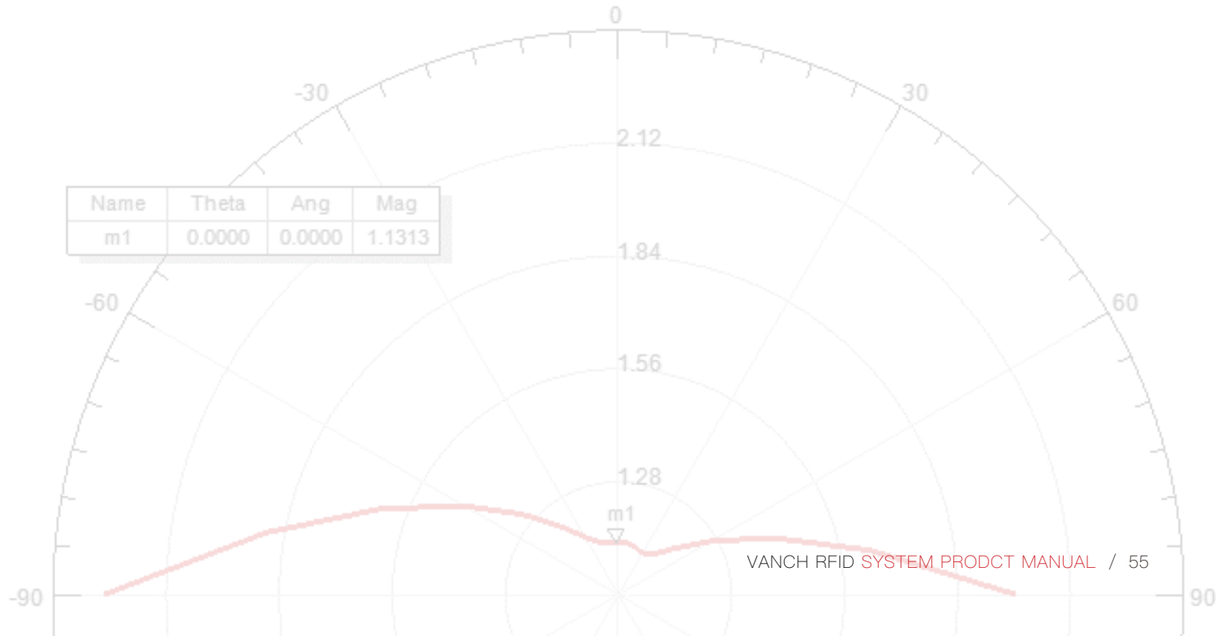
Shelf/ Storage Cabinet Antenna

Image	Model#	Frequency	Gain	Polarization	IP Rating	Dimension	Weight	Connector
	VA-9102V Antenna	902-928MHz	5 dBi	Linear polarization	IP 67	460*90*18	0.65	SMA-female , or customized
	VA-9122H Antenna	902-928MHz	12 dBi	Linear polarization	IP 67	295*262*15	0.9	MMCX antennas connector or can be customized
	VA-9101H Asset tracking antenna	902-928MHZ	10 dBi	Linear polarization	IP 53	830*100*30	0.7	SMA Female

PCB antenna

Image	Model#	Frequency	Gain	Polarization	IP Rating	Dimension	Weight	Connector
	VA-0906 handheld terminal antenna	860-960MHz	2 dBi	Vertical polarization	/	90*60*1.5	0.11	SAM antenna interface or custom
	VA-1010 panel antenna	902-928MHz	4 dBi	Circular polarization	/	100*100*1.5	0.2	N Female
	VA-0909 panel antenna	902-928MHz	4 dBi	Right circular polarization	/	90*90*1.5	0.15	SAM antenna interface or custom

	VA-0606 handheld terminal antenna	860-960MHz	2 dBi	Vertical polarization	/	60*60*1.5	0.11	SAM antenna interface or custom
	VA-1301 printer antenna	902-928MHz	2 dBi	Circular polarization	/	130*10*1.5	0.2	N Female
	VA-0503 handheld terminal antenna	902-928MHz	2 dBi	Circular polarization	/	50*30*1.5	0.2	N Female
	VA-2525 panel antenna	860-960MHz	5 dBi	Vertical polarization	/	250*250*2	0.11	SAM antenna interface or custom
	VA-924V PCB board ultra-thin antenna	860-960MHz	3 dBi	Vertical polarization	/	120*112*1.5	0.11	SAM antenna interface or custom
	VA-1212 built-in directional antenna	902-928MHz	5 dBi	Linear polarization	/	120*120*18	0.18	SMA Female
	VA-95 PCB board circular polarization	902-928MHz	4.5 dBi	Right circular polarization	/	260*130*2	0.15	SAM antenna interface or custom
	VA-7070 air dielectric PCB antenna	902-928MHz	4 dBi	Circular polarization	/	70*70*14	0.18	SMA Female



UHF

RFID TAG

Cooperation with famous chips supplier
NXP、Alien、Impinj.

Supply different UHF RFID tag for your RFID system solution demand.

PVC card tags

Image	Model#	Application	MHz	Chip	Material	Mounting way	Dimension	Temperature
	VT-80 (6C+EM125K)	Accesscontrol, City cards, Asset Management Tag	860 ~ 960	Alien / impinj / NXP	PVC / PET	Back glue or Insert	85 * 54	-20°C ~ 70°C
	VT-80/6C	Accesscontrol, City cards, Asset Management Tag	860 ~ 960	Alien / impinj / NXP	PVC / PET	Back glue or Insert	85 * 54	-20°C ~ 70°C
	VT-80/6C+M1 (IOS14443A)	Accesscontrol, City cards, Asset Management Tag	860 ~ 960	Alien / impinj / NXP	PVC	Back glue or Insert	85 * 54	-20°C ~ 70°C

Asset management sysem application tags

Image	Model#	Application	MHz	Chip	Material	Mounting way	Dimension	Temperature
	VT-117 RFID Lock Seal Tag	Container Tracking	860 ~ 960	Impinj M4 ALIEN H4	Polycar bonate + Iron	Lock mounting mode	115*24	-25°C ~ 70°C
	VT-11 Nail Tag	Mainly for management on wood, paper, outdoor public assets, etc.	860 ~ 960	Impinj (4D、4E、4QT)	ABS Plastic	rivet or insert	Φ5 x 36	-25°C ~ 70°C
	VT-8654 Plastic tray tag	Smart shelf tag,Pallet tag, Asset management tag	860 ~ 960	ALIEN / impinj / NXP	ABS Plastic	/	120*27*12	-20°C ~ 50°C
	VT-93 Ribbon tag	parcels tracking, container seals management	860 ~ 960	ALIEN/ impinj	Mixed polypropylene	/	330*2	/

Laundry/Linen management system laundry tags

Image	Model#	Application	MHz	Chip	Material	Mounting way	Dimension	Temperature
	VT-85D	Asset management, Laundry management	840 ~ 960	ALIEN / impinj	Silicon	/	56 * 12 * 1.8	-20°C ~ 85°C

	VVT-85E High-tempera-ture laundry tag	Asset management, Laundry management	860 ~ 960	Alien Higgs-3	PPS Engineering plastics	Hanger, Cloth bag sewing	40 * 24 * 2.2	-25℃ ~ 120℃
	VT-85K textile laundry tag	Asset management, Laundry management	860 ~ 960	Ucode 7M	Soft textile	/	70*15*1.45	-25℃ ~ 70℃
	VT-85H EAS RFID Hard Tag	Asset management, Laundry management	860 ~ 960	Alien Higgs-3	ABS	sewing button	68.8 * 30.5 * 20.5	-20℃ ~ 70℃
	LA-91 Washable Textile Tag	Asset management, Laundry management	860 ~ 960	Alien H3 impinj M418	Washable cloth	Sew to Clothes	75 * 36	-20℃ ~ 70℃
	LA-90A Garment Hang tag	Asset management, Laundry management	860 ~ 960	Alien impinj	Paper	Hang to Clothes	110 * 35	-20℃ ~ 70℃

Animal/livestocks tracking system animal ear tags

Image	Model#	Application	MHz	Chip	Material	Mounting way	Dimension	Temperature
	VT-100 Pig ear tag	Animal Husbandry Traceability And Identification	860 ~ 960	Alien impinj	Silicon	cotter pin	30*13.3mm and diameter 30mm	-30℃ ~ 85℃
	VT-100A Sheep ear tag	Animal Husbandry Traceability And Identification	860 ~ 960	Alien H3 (customized optional)	Import TPU	cotter pin	55*53mm and diameter 30mm	-30℃ ~ 85℃
	VT-100B Cattle Ear Tag	Animal Husbandry Traceability And Identification	860 ~ 960	Alien H3 (customized optional)	Import TPU	cotter pin	female tag:73*47 male tag: 35*16	-30℃ ~ 85℃
	VT-100C Live-bird Leg Ring Tag	Animal Husbandry Traceability And Identification	860 ~ 960	Higgs 3 Mondz 4E	PVP	hang	(H)100mm (D)160mm	-25℃ ~ 75℃

Vehicle management system windshield tags

Image	Model#	Application	MHz	Chip	Material	Mounting way	Dimension	Temperature

	VT-T101C External tire patch tag	record life cycle of tire or Refurbished times	860 ~ 960	Alien impinj	PET	Vulcanization glue	110 * 55 * 3	-30℃ ~ 85℃
	VT-82/6C ceramic tag	Urban intelligent traffic management, Social Taxi Management	860 ~ 960	Alien impinj	PET		110 * 55 * 3	-30℃ ~ 85℃
	VT-89B/6C	vehicle management, warehousing plastic pallets, location tags etc	860 ~ 960	IPJ-P5003 (Monza4QT)	PCB antenna、ABS cover +Aluminum alloy backplate	Rivets or screws	244 * 12 * 13	-30℃ ~ 85℃
	VT-87 Wiper tag/ license plate tag	vehicle management, warehousing plastic pallets, location tags etc	860 ~ 960	NXP (SL\XL\XM)	PCB antenna、ABS cover +Aluminum alloy backplate	Rivets or screws	201 * 12 * 13	-30℃ ~ 85℃
	VT-101B	vehicle management, warehousing plastic pallets, location tags etc	860 ~ 960	/	/		110 * 55 * 3	-40℃ ~ 85℃

Personnel tracking system wristband tags

Image	Model#	Application	MHz	Chip	Material	Mounting way	Dimension	Temperature
	VT-88A Silicon Wristband Tag	Hospital, Meeting attendance,Per-sonnel access control	860 ~ 960	Impinj Monza 5	Silicone rubber	buckle	255 * 21 * 10	-25℃ ~ 70℃
	VT-88C Wristband Tag	Hospital, Meeting attendance, Personnel access control	860 ~ 960	Alien/ Impinj/ NXP	Synthetic paper/Art Paper/ Silicone rubber	buckle	250 * 19 * 0.3	-25℃ ~ 70℃
	VT-88D Wristband Tag	Hospital, Meeting attendance,Per-sonnel access control	860 ~ 960	Alien/ Impinj/ NXP	Art Paper	buckle	92 * 30 * 15	-25℃ ~ 70℃
	VT-88E	Hospital, Meeting attendance,Per-sonnel access control	920 ~ 925	ALIEN H3	ABS	buckle	35 * 31 * 13	-30℃ ~ 70℃

Asset management system anti-metal tags

Image	Model#	Application	MHz	Chip	Material	Mounting way	Dimension	Temperature

	VT-83Q Anti-Metal Tag	logistics, production management, asset management	860 ~ 960	Impinj Monza 4QT	ABS Plastic	Screws, rivets or 3M adhesive installation	110*25*12.85	-20°C ~ 80°C
	VT-40P Printable UHF Anti-Metal Tag	office and IT asset tracking, medical laboratory equipment	860 ~ 960	Impinj Monza 4QT	Special anti-magnetic properties of absorbing materials	Adhesive Installation	70 x 30 or 28 x 102	-20°C ~ 70°C
	VT-83 Anti-Metal Tag	warehouse management, management of the equipment	860 ~ 960	Alien/ Impinj/ NXP	Special anti-magnetic properties of absorbing materials	Adhesive Installation	95 * 25 * 3.5	-40°C ~ 180°C
	VT-94 Anti-Metal Tag	IT asset management, manufacturing management	860 ~ 960	Alien/ Impinj/ NXP	Special anti-magnetic properties of absorbing materials	Adhesive Installation	36 * 13 * 2.7	-25°C ~ 70°C
	VT-94S Anti-Metal Tag	IT asset management, manufacturing management	860 ~ 960	Alien/ Impinj/ NXP	Special anti-magnetic properties of absorbing materials	Backside adhesive	22 * 8 * 2.7	-40°C ~ 80°C
	VT-95 Anti-Metal Tag	IT asset management, manufacturing management	860 ~ 960	Alien/ Impinj/ NXP	Special anti-magnetic properties of absorbing materials	Backside adhesive	25 * 9 * 3	-25°C ~ 70°C
	VT-98 High Tempera-ture Anti-metal Tag	Dashboard administration, industrial equipment management	860 ~ 960	Alien/ Impinj/ NXP	Special anti-magnetic properties of absorbing materials	Backside adhesive	21 * 17 * 2	-25°C ~ 180°C
	VT-150	IT assets, medical assets, valuable instruments and other manage-ment tracking	902 ~ 928	Impinj Monza4QT	metal and liquid environment best		53 * 12.5 * 1	-20°C ~ 85°C
	VT-200 flexible printable metal	IT assets, medical assets, valuable instruments and other manage-ment tracking	902 ~ 928	Impinj Monza4QT	metal and liquid environment best		72 * 38 * 0.8	-40°C ~ 85°C
	VT-600	IT assets, medical assets, valuable instruments and other manage-ment tracking	902 ~ 928	Impinj Monza4QT	metal and liquid environment best		92 * 24 * 1.1	-40°C ~ 85°C

	VT-83M	IT asset management, manufacturing management	840 ~ 960	ALIEN impinj NXP	/	With adhesive	80*20*3.2	-25°C ~ 80°C

Car parking system adhesive stickers

Image	Model#	Application	MHz	Chip	Material	Mounting way	Dimension	Temperature
	LA-97A	glass asset management, vehicle detection identification	860 ~ 960	H3 M4QT	PVC	With adhesive	110 * 40	-25°C ~ 70°C
	LA-8030	digital inventory, retail, fixed asset management	860 ~ 960	Alien Higgs3	PP	With adhesive	80 * 25	-20°C ~ 75°C
	LA-97	glass asset management, vehicle detection identification	860 ~ 960	AZ-9654	Copperplate paper	With adhesive	120 * 50	-20°C ~ 50°C
	LA-10047	glass asset management, vehicle detection identification	860 ~ 960	AZ-9654	Copperplate paper	With adhesive	120 * 50	-20°C ~ 50°C

UHF

RFID Printer

Flexible, Easy to use, Accurate, Economical

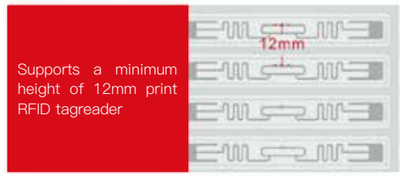
Easy operation, industrial printing performance,
Meet requirements of different customers.

▲ VPR-0407

▲ VPR-0307

Specification

- Ultra-small tag reader: supports a minimum height of 12 mm print RFID tag reader;
- One key location: one key to locate the position of the tag antenna, automatic detection of the best area to read and write;
- First print: Supports a variety of RFID tags first print size, label zero waste.



Supports a minimum height of 12mm print RFID tagreader

100% pass rate Tags: read-write check after the original first rinting technology, complete the testing process all bad label

▲ VPR-0407

Technical specifications

Model#	VPR-0407
Printing Methods	Thermal transfer
Resolution	300 dpi
Max printing speed	8 ips (203.2 mm/s)
Max printing width	4.17" (106 mm)
Max printing Length	79" (2000 mm)
For RFID models	EPC Class 1 Gen 2 / IOS 18000-6C
Storage	8 MB FLASH AROM , 16 MB SDRAM
Label thickness	0.0024"-0.012" (0.06 mm-0.305 mm)
Paper detection methods	Reflective (removable) / transmissive (moveable)
Built-in fonts	Western dot matrix font, vector font can be downloaded, Chinese dot-matrix font option
Power Rating	100-240V 50/60Hz 3.5A
Weight	15kgs
Dimensions	Width 11.3" (286 mm) * deep 17.6" (448 mm) * hidth 11.0" (280 mm)
Working/Storage Temp.	0°C - 40°C (32F - + 104F) /-40°C — 60°C (-40 F — +140 F)
Optional accessories	Cutter, external label rewinding device

UHF

RFID Typical Application Equipment Recommendation

- RFID Library Books Management
- Warehouse/Logistic RFID Management
- RFID Industrial Manufacturing Solution
- RFID Conference Attendance Solution
- VANCH RFID Jewelry Management Solution
- UHF RFID Jewelry Smart Sales Tray
- RFID Race Timing Solution
- RFID Urban Intelligent Traffic Solution
- RFID Port Management Solution
- RFID Food Traceability Management Solution
- RFID Railway inspection equipment tracking system
- VANCH Sesame Box New Retail RFID Solution

RFID Library Books Management

●Inventory Cart

UHF RFID Intelligent Library Management System RFID have brought revolution for library, more and more library have known this. Most of public libraries and Colleges libraries have started to plan RFID system at home and aboard. The RFID libraries have appeared constantly from the first one in inland in 2006 to now.

Adopting UHF RFID technology, it has completed the information collected and updated of the books' tags. It also has combined with library business system to achieve the books' automatic orrowing .It can improve the speed of books' borrowing and reduced the staff's job.

The system consists of book tags, CD labels ,book shelf tags ,tags conversion instrument, intelligent book shelf, automatic book borrowing machine, administrator workstation, RFID anti-theft gate reader.

· The advantages

1. Automatic count on-shelf books.
2. Monitor books location in real time.
3. Automatic searching and disappear the books on the wrong book shelf.
4. Searching for the information of borrowing, renewing, returning and library cards, also with report the loss of library cards.

▲ VC-420TP gate reader

▲ VS-M1002B Intelligent

● Library automatic lending and returning books machine V-Book 99

There are HF(V-HFBOOK99) and UHF(V-UHFBOOK99) two kinds of VANCH Intelligent lending and returning book machine, they have the functions of lending books, returning books, searching books ,renewing books, they also support different kinds of reader cards ,such as the 1D barcode ,2D barcode ,second generation ID card, IC card, ID card and so on. This system adopts strict safe reading and writing tags to design. It has made the system more stable, reliable and refuse the missed reading and wrong reading at the process of lending and returning .This system have vastly improved the reliability and safety of this book machine ,it can be widely used in municipal libraries, school libraries ,enterprise and public institution and so on.

· Application

▲ School library, reading room

▲ Government department reading room, exhibition hall

▲ High-end entertainment and leisure venue reading area

Technical specifications	
Model#	V-BOOK 99
Display	19''inches touch screen
Working temperature	-10℃ ~+50℃
Working humidity	10%~85%
Software	Library automatic borrowing and returning system
Interface connector	10M/100M Ethernet interface
Power supply	AC220V±10%

No.	Products name	Model#	Number	Unit	Reference picture
1	Library automatic borrowing and returning inventory achine	V-Book 99	1	set	
2	Library card data distribution machine	VD-68	1	set	
3	RFID library tags printer	VPR-0407	1	set	
4	RFID anti-theft gate reader	VC-420TP	1	unit	
5	24 hours automatic library terminal	VL-WH-UHF06	1	set	
6	Handheld reader	VH-82	1	unit	
7	Sorting push cart	VS-M1002B	1	unit	
8	RFID library cards	VT-80	1	pcs	
9	RFID book shelf layer tag	VT-BU21	1	pcs	
10	RFID book shelf tag	VT-BU22	1	pcs	
11	RFID book tag	VT-86B	1	pcs	
12	RFID intelligent book shelf	/	1	unit	
13	RFID reader	VF-P32	1	pcs	
14	RFID library management system	/	1	unit	

● RFID Based Intelligent Document Management System

Insist developing the document storage innovation technology concept, have broken the traditional the management model. It have positive adopt RFID document management, improve document data management, information technology upgrading, it can also improve the high standard, high quality, and high efficient professional service.

· RFID Based intelligent document management consists of:

1. Information management system functions modules include:
Document pigeonhole management, documents lending management, statistical statement, automatic inventory, handheld inventory, system setting management and so on.

2. RFID Intelligent Hardware System for document management consists of:
RFID reader, multiple antenna distributor, antenna and RFID handheld reader, RFID document tags, storage location tags and so on.

· RFID document system consists of:

1. RFID tags (VT-86) ;
2. RFID fixed reader (VF-987) ;
3. VANCH RFID middleware (VX-3M) ;
4. RFID printer (VPR-0407) ;
5. RFID document compact shelving antenna VANCH (VA-9101) ;
6. RFID tags distributor (VD-68) ;
7. RFID handheld reader (VH-82) ;
8. RFID gate reader system (VC-420TP) ;
9. RFID document management system oftware;

Warehouse/Logistic RFID Management

● RFID Based Warehouse Logistic Management

This system can suit for industry enterprise manufacturing warehouse, logistic transit shipment warehouse, retail store warehouse, telecommunication warehouse and electricity warehouse management.

· Warehouse management normally uses barcode tags or artificial warehouse management, this management system have obvious disadvantages:

Barcode management: easy copy, not able for dirty-proof, not waterproof, and reading distance is very short.
Artificial recording: complicated working, lots of data information can easily lead to mistakes,add the labor cost when storing.
There is big project doing inventory by hand ,leading to long period ,loss of goods or can not discover the thefts in time .

With introducing RFID, it can make enterprise warehouse management higher working efficient and more transparent.
Having RFID inlay packaged into the barcode label, stick to every goods' package or tray, there you can write goods information, location. You can also write the receiver's detailed information when the goods are taken out of the warehouse .it can also set RFID fixed reader and RFID handheld reader through warehouse and distribution channels to recognize and monitor the goods circulate.

· The System Performance

- The System Perforance The labor cost can reduce 20-30%.
- 99% warehouse products can be visualization, can reduce the risk of goods loss.
- Improve supply chain management to reduce 20-25% working serving time.
- Improve information accurate and reliable in warehouse and logistic management.
- High efficient, accurate data collection, provide working effiency.
- Automatically collecting data of in/out of the warehouse, reducing the labor mistakes.
- Reduce the cost of enterprise warehouse and logistic management.

RFID Industrial Manufacturing Solution

Intelligent Manufacturing Key Technologies and Solutions

- Intelligent sensor technology
- Remote wireless communication technology
- Robot Application Technology
- Intelligent equipment and robot integration program
- RFID technology
- Intelligent Control System I / O Technology
- Mechatronics integration technology
- Electrical control system integration technology
- Intelligent warehousing logistics solutions
- MES production management information system solutions
- Wisdom Factory Solutions

VI–IR610

- The shape is industrial design, very sturdy and durable. It suit for harsh industrial production line environment(includes Electromagnetic interference, dust, waterproof, anti demolition, maximum resistance –25 degrees –70 degrees environment, vibration, noise),Waterproof Ip67.
- Software intelligent monitoring of the working state, 24 hours X running for 365 days does not crash.
- It's ideal equipment selection for industrial production line.

Automobile vehicle manufacturing | Automobile parts | Machinofacture | Electronic Manufacturing | Food and Beverage | 3C field | Warehouse Logistics











RFID Conference Attendance Solution

VANCH UHF RFID Barrier–free Conference Attendance System

Based on UHF RFID Barrier–free Conference Attendance System, it can be designed to allow each participant to wear a wireless badge (RFID tag). No need to actively scan tag and can be automatically signed when the participants wear a RFID badge tag walking through entrance. No matter which entrance participant walk through, they can be signed automatically by reading RFID tag on neck without actively scanning If someone has no RFID tag, it will trigger alarm when passing through entrance. Therefore, it can be achieved that participant can be signed conference automatically and their information can be displayed on LED screen.

- Automatic identification, to avoid crowding
- Participant status verification, to ensure the safety of conference.
- Automatic identification of entrance and exit of participant
- Real–time uploading data, network data sharing.
- Easy to install, easy to use, stable operation
- Large screen can edit welcome information and conference organization.






Relative RFID product for this system

Type	Model#	Unit	Quantity
Touch screen query machine	VS – 1003B	set	1
Desktop Reader	VD – 68	set	1
Meeting gate	VC – 430	set	1
Conference card	VT – 80	unit	1
Conference software	Vsoft31	unit	1

VANCH RFID Jewelry Management Solution

Shenzhen VANCH Intelligent Technology Co.,Ltd launched a set of RFID based technology to inventory jewelry and other technical solutions.

Nowadays, RFID technology application has been developing rapidly. RFID based jewelry management and information management is the important means to strengthen the inventory management, sales management and improve management efficiency.

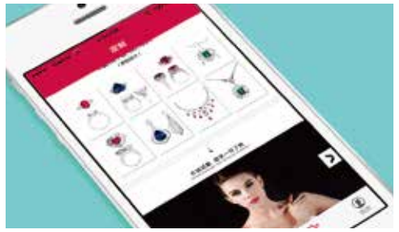
It will greatly and significantly enhance the efficiency of jewelry business (Inventory, warehouse, out/in warehouse), reduce loss rate, increase cash flow rate, enhance corporate brand and more effective to provide advertising, VIP customer management and other valueadded services.

⊙ System Composition

This system consists of RFID jewelry tag, RFID desktop writer, RFID inventory reader, computer, application management software, network cable, switch, middleware and server.

⊙ Effectiveness of Implementation

After using our RFID reader, handheld reader and automatic tuning, some customers have some feedback as follows.



- The recognition accuracy of jewelry inventory is high and it can avoid repetitive reading, misread or can't be read, further reduce.
- Improve the efficiency of jewelry quotation: Use our handheld reader program, which not only transition from traditional personnel and professional quotation to the ordinary employees can offer, but also greatly save various jewelry enterprise human resources, reduce the risk of miscarriage.
- A variety of desktop reader for options, it can meet requirement of read speeding and also be selected according to the actual situation without interface. It is easy to use.
- It greatly guarantees jewelry sales security and achieve intelligent sales management. Using smart showcase, you can automatically identify the number of stores in the showcase to reflect daily sales situation. It can also clearly show time of returning jewelry and specific operator, therefore providing a great convenience for the standardization of management planning.
- Reading speed for RFID jewelry tag was significantly improved and hence greatly speed up the jewelry inventory speed, reduce the loss of theft, for example inventorying 6000 unit jewelry, the inventory time needed change from 4 working days to 0.5 working day.
- The multi-ports reader connect with several antennas, separate time working, separate time switching operations, to a large extent reduce the entire system hardware costs.

The combination of RFID solutions and asset tracking applications not only addresses the worries of jewelers, but also facilitates their business.

UHF RFID Jewelry Smart Sales Tray

⊙ Features and Advantages

VANCH sport timing system is one of the most accurate, most sensitive and easiest UHF RFID timing systems on the market. It has the most advanced hardware and software design, provided to the event organizers and athletes a good experience.

- UHF RFID cheap chips, suitable for thousands of large-scale events, and the chip can be reused.
- The reading technology of the host using the United States the best chip, embedded computer to ensure the most accurate and most sensitive timing effect.
- Each host connected to the timing floor antenna can be able to read 450 chronograph chips (athlete) in one second.
- Easy to install, easy to move, only need to connect four or eight matt antennas; and then connect VANCH timer to the host. That is OK.
- RFID timing tag can be attached to shoes or anywhere of athletes, such as chest and back, athletes can wear two RFID timing chips, greatly improving the read rate.
- Built-in high-capacity battery can support the device to use up to 8 hours or more, each time the timing host can connect the matt antenna up to 8 meters.

▲ Jewelry inventory tracking UHF RFID Reader

▲ Jewelry Smart Sales Tray

▲ Jewelry Smart Sales Tray

Specification

Model#	VX-JI20
Frequency range	865-868MHZ(or Customized)
Frequency modulation	FHSS or fixed-frequency, can be set by software
RF output	10-30dBm adjustable; 50 ohm load
Communication rate	Serial rate 9600～115200bps, RJ45 is 10Mbps
Read tag speed	400tags/sec
Memory capacity	800tags,96bit
Antenna	Built-in 2 feed point ceramic antennas
Application software	Supply API SDK application routines
OS	Linux2.6.30
Support	RSSI, antenna connection protection, Environmental temperature monitoring
Secure firmware upgrade	The upgrade mechanism can be extended
Input / output (GPIO)	4 input, 4 output
The processor	ATMEL AT91SAM9260 CPU, ARM926EJ-S core processor
Memory capacity	16MB SDRAM, FLASH memory, 128M * 8 bits Nand Flash (K9F1G08U0B)
Dimension	305 * 201 * 101
Operation temperature	-20°C to +60°C
Storage temperature	-20°C to 85°C

RFID Race Timing Solution

⊙ Features and Advantages

VANCH sport timing system is one of the most accurate, most sensitive and easiest UHF RFID timing systems on the market. It has the most advanced hardware and software design, provided to the event organizers and athletes a good experience.

· UHF RFID cheap chips, suitable for thousands of large-scale events, and the chip can be reused.

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· Built-in high-capacity battery can support the device to use up to 8 hours or more, each time the timing host can connect the matt antenna up to 8 meters.

Product Name	Model#	Picture	Function
UHF RFID Desktop Reader	VD-67		Programming &Writing Tags information
Sport Timing Host	V-RTS2000		It consists of RFID reader, embedded computers, network compo-nents, and power control system components; can connect up to 4 or 8 antennas; provide high sensitivity 450 / sec read
Sport timing floor mat antenna	VA-9108		Block design, smooth, soft, waterproof and easy to install, supporting the use of the sport timing host
Sport Timing Software	V-RTS2015		English interface, fast guide information, suitable for different rules of the game, easy to use
Tournament label	VT-88		waterproof, anti-tear, easy to wear

Timing host parameter table		
Model#	V-RTS2000-04	V-RTS2000-08
Weight	6.5 Kg	7.5 Kg
Continuous use of time	13 hours	10 hours
Read range	4 m	8 m
Power supply	AC110-220V(Built-in 12V 40Ah lithium battery)	

Maximum read speed	300unit/s
Receiving sensitivity	-82dBm
Chip protocol	IOS 18000-6C
Transmit power	30 dBm
Network Type	TCP/IP, WIFI,3G/4G
Clock accuracy	One thousandth of a second
Operating system	Windows 7
Storage capacity	More than 10 million tag information
Size	350 * 260 * 280
Display size	7inch
Waterproof	IP 54
Gross Weight	15 kg
Software	Grab the data from the host, automatically rank, export and print the results

▲ V-RTS2000-08 Sport Timing Host

▲ Sport timing floor matantenna

▲ Sport Timing Software

RFID Urban Intelligent Traffic Solution

Intelligent traffic system is one of the most effective ways to alleviate traffic congestion, reduce traffic accidents, reduce environ–mental pollution and improve the overall efficiency of traffic system. It has been widely used both oversea and domestic. How to apply RFID radio frequency identification to traffic management has become one of the ways to improve traffic problems today.

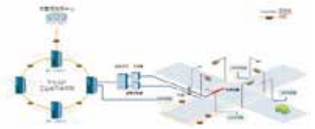
Intelligent traffic system is the future trend of urban construction. In traffic information access, traffic control. Transportation industry management, traffic wisdom and traffic information services, and other aspects of the formation of effective. Usage with a wide range of practical applications.

Urban intelligent transportation system, covering the main roads, hubs and stations, airports and key transport infrastructure and other places and regions, to achieve a comprehensive monitoring of traffic conditions, comprehensive control of road traffic and travel for the traveler Service, to promote the integration of traffic management and regional traffic integration, to enhance the overall efficiency of the city traffic and intelligent command ability, intelligent transportation is an important system of intelligent city construc–tion system.

IOT

Identification

- RFID ID identification
- Sense–full perception
- Communication – transport
- Think – intelligent progressing



Intelligent traffic

Element of intelligent traffic

- ID identification
- Sense – traffic information collect
- Communication – traffic information transport
- Think – traffic information progressiong

RFID application

RFID technology to intelligent transportation, its automatic identification and dynamic information collection of great advantages, effectively solve the traffic information construction bottleneck.

urban intelligent traffic sub–system

- Traffic information exchange platform
- Traffic detection system.
- Road traffic control system
- Traffic management systems
- Traffic command system
- Public travel information service system

RFID Port Management Solution

● RFID based Vehicle weighting system solution

Large energy consumption enterprises, mines, warehouses have a large number of material transport vehicles into the need for parking, registration, weighing and other procedures by the operator to manually enter the data into the computer, not only timecon–suming, and the error rate, Breed man–made fraud, to the enterprise caused a lot of economic losses. RFID based Vehicle weighing system can effectively solve the above shortcomings of traditional weighing methods, to be measured vehicles are carrying "electronic license plate" – that is, radio tags (tag), the vehicle scale measurement, the special reading equipment will automatically equipment to the electronic License plate. And the electronic license plate RFID tag can't be removed once installed (to solve the "cloning car" problem). Electronic license plate RFID tag has been written in the scale to solve the "repeat the scale" problem. Dedicated reader can be integrated with the original weighing system integrated system to achieve automatic measurement, automatic license plate identifi–cation integration, completely avoid manual operation, high efficiency.

· System Features

1. All the scale vehicles have a computer automatically record "electronic license plate", remove the manual intervention electronic license plate can't be removed once installed.
2. Electronic license plate data can't be copied, fundamentally eliminate the copy, forgery, cheating phenomenon,
3. Dedicated electronic license plate RFID tag can withstand the damp, cold, hot and other harsh environment use.
4. "Electronic license plate" has no power technology and no maintenance, but has long life.
5. Fully guaranteed reading distance and identification distance of 7 meters or more can adapt to the speed as high as 80km / h.

● Port Electronic Terminal. RFID Auto–release Solution

Container terminal management system includes electronic plate auto identification system, signal electronic lever control system, weighting data collect system, Container Terminal Management Systems.

· Purpose of System Design

1、Set up intelligent port bayonet system by installing electronic railings control system with the lane signal light, RFID vehicle management system, Weighbridge data collection system, electronic bayonet data real–time process–ing system, to control the trucks in and out of the port area and provide effective electronic data support for trucks classification.

2、Install electronic railings control system with the lane signal light to indicate the vehicle to release by port data comparing, barrier up and down and also the traffic lights.

3、Install RFID vehicle management system for truck driver, distribute the electronic RFID tag with unit ID and related information. The tag will be read and compared with the port management system at the bayonet.

4、Install RFID data collection system at the weighbridge, to collect data of trucks in/out and calculate cargoes weight in the port area.

5、Through the electronic bayonet data real–time processing system, to do the devices integration and data communication with the customs regulatory business system.

- Customs Logistics Monitoring System
- Customs Portal Integrated Management System
- RFID Vehicle License Plate Tracking Subsystem
- RFID IC Card Vehicle Management Subsystem
- Weighbridge Mining Subsystem
- Traffic Light Electronic Lever Control System

RFID Food Traceability Management Solution

Food Safety Traceability with UHF RFID Solution

The safety and traceability of food is an increasingly relevant topic for producers, suppliers, and end consumers alike. Regulations like the European Union's EC 178/2002 or the United States Department of Agriculture's 9 CFR lay down binding food safety procedures for members. However, an area where these regulations are not extensively focused is internal traceability. At this stage of production, significant safety advantages are possible. These include the ability to collect more data that will enable substantial improvements in process control and stock management as well as more targeted and precise recall campaigns.

The setup of RFID technology provided by VANCH compelling advantages for food tracking and tracing in meat production facilities, as it allows fully automated noncontact detection along the entire process chain. The transponders are resistant to contamination and survive large temperature fluctuations as well as changes in humidity. Thus, this identification technology is largely maintenance-free. RFID transponders also offer the opportunity during the process to receive and store information. Since they are passive elements, no additional power supply is needed. Today, the customer runs 600 identification systems and 30,000 RFID transponders in their central processing plant—enabling a fully automated and safe internal tracking and tracing of meat.

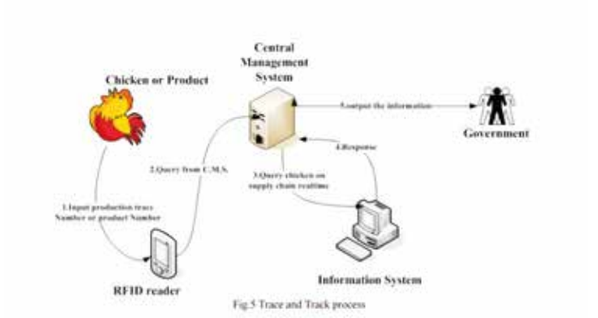


Fig.5 Trace and Track process

RFID tag is installed in the package of food. The reader connects with antenna, sensor with reader, RFID tag data will be transferred to The Food Safety Management Database via network. All the suppliers register all the information to the RFID Public Service System. Based on food safety management database, integrate with supply chain that the system supplys food safety information service, food safety trace, food quality assess and so on.

● Application Service

Base on the integration between food safety management database and food supply chain information, the system can supply the services as below:

· Food Information Service

The client search the information via food information service system when they are having dinner, can get the location, producer, date, cooker, style and so on. Also can get the information about transportation and safety when shopping in the supermarket.

· Food Safety Traceability

Once having an outbreak, the government can confirm the goods information where they are from, where they went, who produced it. Not only tracing the final user, but also the progress when produced and transported so that can supply a solution in time.

· Terminal Search System

The customer can search the food information in the supermarket via RFID system which is supplied by supermarket or factory.

RFID Railway inspection equipment tracking system

High-speed railway is a fast and convenient way for people's travel . How can ensure the safe with high speed? This is the key point that people concern, also it's the most concerned by the world. With this kind of attention, we walked into the railway section and truly record everything that railway workers did for the safe operation of high-speed railway by Lens.

The high-speed trains are operated during the day, so the railway workers have to maintenance the train from midnight 0:00 am to 04:00am in the morning. And they call this maintenance point "skylight point". From 0:00 to 04:00 am, it is the golden time for people to sleep, but the high-speed railway maintenance workers need work highly concentrated without careless during this time. High standards and strict requirements are their working principles. Keep safety for passengers and run railway at high speed is their sacred mission and goals. Day after day, year after year, they quietly dedicate everything to the safety and speed of travellers in dark. In order to ensure the safety and speed of railway transportation, railway maintenance need keep pace with the times urgently. However, railway maintenance is inseparable from the strong support of railway maintenance machinery and equipment. In order to ensure the safe operation of trains at specified speed, high-speed railways have strictly requirments for tools used in the maintenance process. In the "High-speed railway signal operation guidance" (transportation signal [2011] No. 379) document strictly stipulates that the tools must be do inventory checking(before & after the road), then they can be erased and delivered use. Most of the inventory management methods currently used are manually counted and confirmed by manpower. Due to the variety of tools used and sorting, the quality of the personnel is uneven, so it is easy to do inventory errors to cause danger for high-speed rails.

In order to eliminate the safety hazards arising from the above-mentioned traditional management methods and improve the management of railway maintenance machinery and equipment.The RFID-based railway maintenance inspection tool management system came into being. This system is a combination of modern science and technology and economic development. The inspection worker carry it with them during maintenance. When start the work, the tools will be used need do the "warehouse out"process, when tools returned to warehouse, they need scan the tools with tags, and do the "warehouse in"process. When you need leave the inspection/maintenance site, you can use the "Browse" function on the handheld to check tools's inventory and confirm. If the tool is not returned, the handheld device will prompt the worker by voice that he did not retrieve the lost tool. This management system will greatly improve work efficiency and automation, ensure the tools, tools quantity, tool part no.that returned are the same as tools list. This can avoid accidents caused by the missing tools on railway.

● RFID application in railway tools management

Use big data management method, combine with face recognition, bio-palm vein recognition, QR code scanning, RFID radio frequency identification and other technologies, the unique "identity card" code is assigned to a single substance, and the locomotive is used to detect the data resources of each information system. "Information flow, service distribution, professional management", to achieve material life cycle and full trajectory tracking management, improve the fine management of enterprise materials.


▲ RFID Handheld device to check tools details


▲ "palm vein recognition" take tools

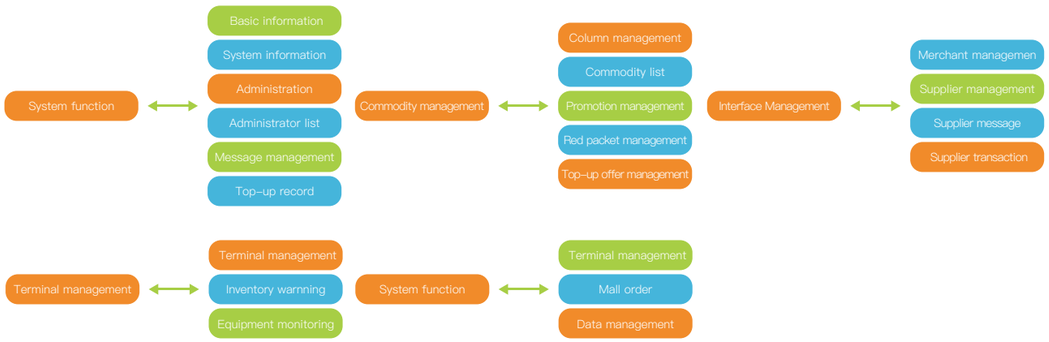

▲ "palm vein recognition"return tools

VANCH Sesame Box New Retail RFID Solution

⊙ Product information

Freezer, normal temperature cabinet, Single-door, double-door, multi-door can be used, scan payment, palm vein payment, automatic settlement (WeChat payment, Alipay, Sesame payment).

⊙ System software functions module



Model#
WIOT-7721 (Single door) / WIOT-1802 (double-door)
W * D * M (mm)
700 * 700 * 2100 (Single door) / 1844 * 770 * 1940 (double-door)
Remark: this model is Refrigerated storage cabinet
Or choose (normal temperature cabinet, freezer)
Recommend commodity quantity
100 (Single door) / 200 (double-door)
5-layer sensing shelf (standard)
Advertising screen
4G module + antenna
Camera, electronic lock kit, power kit
Sale guide price (negotiable)
Software service fee (negotiable)
Optional product (price)
Voice module (negotiable)
Palm vein recognition (negotiable)
Handheld fast marking machine (negotiable) handheld fast writing equipment
RFID label (negotiable)
Wear hanging rack kit (negotiable) bagged products need

VANCH

Success Projects and Accessories Show

Serve with heart, help you succeed

Let us provide you the product with high quality and attentive service.
We will lead a more prosperous information age.

Rfid Retail

Wuxi Bus Terminal Car Networking System

Shenzhen RFID files inventory

Renmin University of China
RFID parking lot management project

Jiangyinyunting middle school RFID personnel management

Hainan RFID Island and cattle tracing

Heaven RFID warehouse management in logistics company

RFID Cotton Bags management in Xinjiang

Chengdu xiaotong RFID management

Power supply bureau RFID tool management

Zhuji RFID archives project

Huawei Feida RFID Management

RFID military material management

Rfid libary management

Beijing ROIT RFID management

Daqing sofu RFID management project


Vietnam RFID garment processing management


Rfid visitor management, Italy


Philippine parking lot RFID access management


Lithuanian RFID Vehicle Management


Thai bus RFID tracking management


Malaysia logging site RFID wood transportation manages

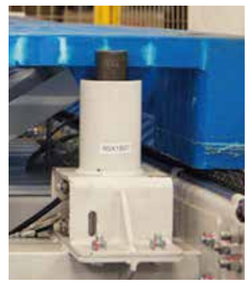

Jordan RFID Outgoing Management


Turkey RFID Mine assets management


Uzbek Hotel RFID VIP Customer Management


RFID Car management of a European parking lot

Croatian RFID Running–Timing

Indonesian RFID Production Line Management


Rfid tire management for Brazilian customers


Argentina RFID Vehicle Annual Inspection

Portuguese RFID racing system


RFDI Management for a Malaysian Steel Works

Guide of selecting UHF RFID Antenna

The RFID reader antenna transmits and receives signals with electrical and magnetic characteristics at the same time. When the radio waves propagate in space, the direction of the electric field changes according to a certain law. This phenomenon is called polarization of radio waves. It can be divided into 2 kinds according to the different polarization.

Linear polarization antenna

The electromagnetic wave propagates completely in the direction of signal propagation (vertical or horizontal) on a plane. When the direction of the tag is known and fixed, the RFID antenna is polarized to match the RFID tag (vertical corresponding to vertical or horizontal corresponding level). It can get the best read rate.

Circular polarization antenna

When the angle between the electric wave polarization plane and the normal earth plane changes from 0 to 360° periodically, that is, the magnitude of the electric field changes, and the direction changes with time, the shape of projection of the electric field vector end trajectory on a plane perpendicular to the direction of propagation is a circle, it's Circular polarization.

Gain

Gain is a parameter that comprehensively measures the energy conversion and directional characteristics of an antenna. It is defined as the product of the direction coefficient and the antenna efficiency. The higher antenna direction coefficient, the higher gain coefficient.

- Azimuth: A measure of the ability of an antenna to radiate its ability in the desired direction;
- Main lobe width: The main lobe width is the physical quantity that measures the extent of the largest radiating area of the antenna;
- Polarization loss: When the polarization direction of the transmitting signal antenna is inconsistent with the polarization direction of the receiving antenna, polarization loss is usually generated during the receiving process.

RF cable connector


SMA connector


SMA Male connector


SMA Female connector


MCX connector


MMCX connector


TNC connector


TNC Male connector


TNC Female connector


SMB Male connector


SMB Female connector


BNC Female connector


BNC Female connector


N type connector


N type Female connector

Radio frequency identification system dedicated converter


TNC public load


TNC Female–N Female converter


TNC Male– N Female converter


N Male– SMA Female converter


SMA load


SMA Male–TNC Reverse Polarity converter


IPEX connector


MMCX Male–SMA Female converter


RFID antenna Feeder lightning arrester VPJ–0101

RFID pcb board connector

MMCX socket

MCX Male connector

RF cable

1/2 inch cable

178 cable

195 cable

240 cable

316 cable

Other accessories

Power adapter

Serial cable

Antenna bracket

Antenna installation frame

US plug

EU plug

UK plug