# VANCH UHF RFID Reader

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<tr>
<th>Vanch Brand Model</th>
<th>Picture</th>
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<tr>
<td>VF-847</td>
<td><img src="image.png" alt="Image" /></td>
<td>- Adopt impinj indy r2000 chip and ARM9 processor + Linux platform, realize high-speed reading and fast data operation; &lt;br&gt; - Support tags with standards EPC global UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B; &lt;br&gt; - Work frequency 860-868MHz, 902-928MHz (depends on different countries); &lt;br&gt; - Support RS232, RS485, Ethernet, Wiegand communication interfaces; &lt;br&gt; - Support SSH, FTP, Telnet, HTTP network communication modes, and embedded with WebServer to realize basic self-testing function; &lt;br&gt; - Support 1, 2, 4 TNC antenna ports; &lt;br&gt; - Output power 32dbm adjustable, support AUTO mode, COMMAND mode, Trigger mode; &lt;br&gt; - Buzzer and LED indicator light; support file sharing, ftp firmware online upgrade;</td>
<td><strong>Performance Index</strong>&lt;br&gt;OS: LINUX2.6&lt;br&gt;CPU: ATSAM9G20&lt;br&gt;Memory: SDRAM 64M, NandFlash 128M&lt;br&gt;Frequency: 860MHz – 960MHz (depends on countries’ frequency)&lt;br&gt;Support countries: US, Canada and other regions following U.S. FCC&lt;br&gt;Europe and other regions following ETSI EN 302 208 with &amp; without LBT regulations&lt;br&gt;Mainland China&lt;br&gt;Japan&lt;br&gt;Korea&lt;br&gt;Malaysia&lt;br&gt;Taiwan&lt;br&gt;FM mode: FHSS or fixed frequency, set by software&lt;br&gt;RF output: 20-30dBm, 50Ω load&lt;br&gt;Tag inventory peak speed: &gt; 500 tag/s&lt;br&gt;Tag buffer: 800 tags @ 96 bit EPC&lt;br&gt;Tag RSSI: support&lt;br&gt;Antenna connection protection: support&lt;br&gt;Environment temperature monitor: support&lt;br&gt;Antenna quantity: 4 TNC antenna ports&lt;br&gt;Communication interface: 10M/100M self-adaption Ethernet, RS232, RS485, Wiegand26/34&lt;br&gt;Communication rate: Serial port 9600~115200bps, RJ45 10Mbps</td>
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<td>8. support multi-group I/O interface, easy to application integration; 9. high industrial structure design, supply to harsh environment; 10. apply to warehouse logistic supply chain, fixed assets management, vehicle management, manufacturing and etc.</td>
<td>Reliable firmware upgrade: Extensible upgrade mechanism GPIO: 2 input, 1 output Application software interface: Provide API SDK and VC, VB, JAVA application routine Tag operation performance Reading distance: With 8dbi antenna, 3-25m (tag dependent) Air interface protocol: EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C/ ISO18000-6B Maximum receive sensitivity: -82 dBm; maximum return loss: 10 Dbm Machinery electric performance Dimension: 200(L)*200(W)*35(H)mm Material: Die-casting aluminum Power supply: Equipped with power converter, 220V AC input, +12V/3A DC output RF output interface: TNC Net Weight: &lt;2KG Humidity: 5% to 95%, non-condensing Protection grade: IEC IP51 Operating temperature: -20 ºC to +60 ºC Storage temperature: -40 ºC to 80 ºC</td>
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<td>VF-747 UHF RFID Fixed reader</td>
<td></td>
<td>Frequency range: 860-868MHz, 902-928MHz (can be customized)</td>
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<td>Frequency modulation: FHSS or fixed-frequency, can be set by software</td>
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<td>RF output: +10.0 to +30.5 dBm; 50 ohm load</td>
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<td>The number of antennas: 1 SMA antenna connector; 2 SMA antenna connectors; 4 SMA antenna connectors for selections</td>
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<td>Communication interface: 10M/100MAdaptive Ethernet / RS232 / RS485 / Wiegand26/34 interface</td>
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<td>Communication rate: Serial rate 9600~115200bps, RJ45 is 10Mbps</td>
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<td>Secure firmware upgrade: The upgrade mechanism can be extended input / output (GPIO): 2 inputs, 1 output</td>
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<td>Application software: Supply API SDK and VC and VB, Java application routines</td>
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<td>Reading distance: 8dbi Antenna configuration, typical read range: 3 to 25 m (depends on tag)</td>
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<td>Protocol: EPC global UHF Class 1 Gen 2 / ISO 18000-6C / ISO18000-6B</td>
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<td>Maximum receiver sensitivity: -82 dBm; Maximum return loss: 10 DBm</td>
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<td></td>
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<td>Dimension: 200 (L) * 200 (W) * 35 (H) mm</td>
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<td>Power: With 220V AC input, the output of +12 V/3A DC power converter</td>
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<td>Weight: &lt;2KG</td>
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<td>Humidity: 5% to 95%, Non-condensing</td>
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<td>IP rating: IEC IP51</td>
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<td>Operating Temp.: -20 ºC to +60 ºC</td>
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- Shell adopt high strength die-casting aluminum, highlighting the product quality
- Adopt high-performance Impinj UHF reader chip IndyR2000, the best Intensive reader mode, the maximum read speed and optimum read ranges.
- Application: logistics supply chain, fixed asset management and library and archive management etc.
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| VF-447E UHF RFID Fixed reader | ![Picture](image) | UHF, UHF-RFID | **Storage Temp.**: -40°C to 80°C  
**Frequency range**: 860-868MHz, 902-928MHz (can be Customized)  
**Frequency modulation**: FHSS or fixed-frequency, can be set by software  
**RF output**: 30 dBm; 50 ohm load  
**The number of antennas**: 1 SMA antenna connector; 2 SMA antenna connector; 4 SMA antenna connectors for selections  
**Communication interface**: 10M/100MAdaptive Ethernet, RS232, RS485, Wiegand26/34 interface  
**Communication rate**: Serial rate 9600~115200bps, RJ45 is 10Mbps  
**Secured firmware upgrade**: The upgrade mechanism can be extended  
**(GPIO) Input / Output**: 2 inputs, 1 output  
**Application software**: Supply API SDK and VC and VB, Java application routines  
**Reading distance**: 8dbi antenna typical reading distance 3~10 meters (depends on tag)  
**Writing distance**: 0-5 meters  
**Protocol**: EPC global UHF Class 1 Gen 2 / ISO 18000-6C  
**Dimension**: 180 (L) * 168 (W) * 41 (H) mm  
**Power**: With 220V AC input, the output of +12 V/3A DC power converter  
**Weight**: <1KG  
**Humidity**: 5% to 95%, Non-condensing |
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| VF-647 UHF RFID Fixed reader | ![Picture](VF-647.png)  |  ● With high performance Impinj UHF reader chip IndyR2000, achieve best multi-tags read effect, optimal read speed and read range  
● Apply for: supply chain, fixed assets management, manufacturing and etc.  | IP rating: IEC IP52  
Working temp.: -20 °C to +60 °C  
Storage temp.: -40° C to 80° C  
Tag air interfaces: EPC Gen 2 / ISO 18000-6C / ISO18000-6B  
Frequency ranges: 902~928MHz (customize for your requirement)  
Work style: For FHSS or fixed frequency  
Antenna port: 4SMA (female) antenna port  
RF power control: +10.0 to +32.5 dBm  
8dbi antenna, Read distance3~20M (Tags dependent)  
Max receiving sensitivity: -82 dBm; Maximum return loss: 10 dBm  
Communication interface: LAN, RS232, RS485, Wiegand 26/34  
Communication rate: serial port rate 9600 ~ 115200bps, RJ 45 is 10Mbps  
Reliable firmware update: extensible upgrade mechanism  
Input/output (GPIO): 2 route input, 1 route output  
Power: External 220V AC, +12V/3A DC adapter  
Consumption: Average Power<20W  
Non-condensing Enclosure: IEC IP52  
Operating Temp.: -20 °C to +60 °C  
Humidity: 5% to 95%, no condensed  
Dimensions: 220(L)*200 (W)*48(H)mm  
Weight: 1.5KG  
Application software interface: Provide API SDK, Demo in VC and VB, JAVA |
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| VF-647P Waterproof UHF RFID Fixed Reader | ![VF-647P Waterproof UHF RFID Fixed Reader](image) | - Adopt High-strength die-casting aluminum shell, IP-67 protection rating  
- Adopt high-performance Impinj UHF reader chip IndyR2000 and TI ARM Embedded processing chip  
- Achieve stable operation of the multi-lane free flow by Tag read sensitivity and Collaborative professional algorithm  
- Application: Intelligent transportation, Port and dock vehicle management and outdoor harsh environment | Frequency range: 860-868MHz, 902-928MHz  
Frequency modulation: FHSS or fixed frequency, can be set by software  
RF output: +10.0~+32.5dBm, 50ohm load  
Antenna number: 1~4 SMA antenna connectors  
Communication interface: 10M/100M adaptive Ethernet, RS232, RS485, Wiegand26/34  
Communication rate: serial rate 9600~115200bps, RJ45 10Mbps  
Secure firmware upgrade: the upgrade mechanism can be extended  
Input/Output(GPI/O): 2 input, 1 output  
Application software: supply API SDK, VC, VB, JAVA application routines  
Reading distance: 3~20m with 8dbi antenna configuration(tag dependent)  
Protocol: EPC global UHF Class1 Gen2/ ISO18000-6C  
Dimension: 256(L)*200(W)*86(H)mm  
Power: 220V AC input  
Weight: <4kg  
Humidity: 5% ~95%, non-condensing  
IP rating: IEC IP67  
Operating Temp.: -20~+60°C  
Storage Temp.: -40~+80°C |
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| **VF-682** UHF RFID Fixed reader (8 ports) | ![Image](image1.png) | - Use high performance Impinj UHF read chip IndyR1000, achieve best multi-tags read mode, best read rate and best read range  
- Apply for: supply chain, fixed assets management, library and archives management, manufacturing and etc | Tag air interfaces: EPC Gen 2 / ISO 18000-6C  
Frequency ranges: 902~928MHz (customize for your requirement)  
Work style: For FHSS or fixed frequency  
Antenna connector: 8SMA (female) antenna ports  
RF power control: +10.0 to +32.5 dBm  
8dbi antenna, Read distance 3~20M (Tags dependent)  
Max receiving sensitivity: -82 dBm; Maximum return loss: 10 dBm  
Communication interface: LAN, RS232  
Communication rate: serial port rate 9600 ~ 115200bps, RJ45 is 10Mbps  
Reliable firmware update: extensible upgrade mechanism  
Power: External 220V AC, 12V/3A DC adapter  
Consumption: Average Power<20W  
Non-condensing Enclosure: IEC IP52  
Operating Temp.: -20 °C to +60 °C  
Humidity: 5% to 95%, no condensed  
Dimensions: 220(L)*200 (W)*48(H) mm  
Weight: 1.5KG  
Application software interface: Provide API SDK, Demo in VC and VB.JAVA |
| **VI-85E** UHF RFID Integrated Reader | ![Image](image2.png) | - This reader can read and write for ISO-18000-6B, ISO-18000-6C (EPC G2), TK900 standard RFID TAGS. Integrated with antenna and reader, small volume, light weight, easy to install. Apply for vehicle access management, ETC, etc. | Tag air interfaces: EPC global UHF ISO-18000-6C (EPC G2), ISO-18000-6B standard  
Frequency ranges: 902~928MHz (customize for your requirement)  
Work style: For FHSS or fixed frequency  
Antenna: 9dbi antenna  
RF power control: 20-30dBm |
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<tr>
<td>VI-86E UHF RFID Integrated Reader</td>
<td><img src="Image" alt="Image" /></td>
<td>personnel access management, electronic security, logistics monitor, production automation management and other industry.</td>
<td>9dbi antenna, Read distance 5<del>10M (Tags dependent) Work mode: Auto, Command, trigger Communication interface: LAN, RS232, RS485, Wiegand26/34 Communication rate: Port rate 9600</del>115200bps, RJ45 is 10Mbps GP I/O Interface: I/O Interface (12 needle + 4 needle) Power: External 220V AC, +9V/3A DC adapter Consumption: Average Power &lt;10W Non-condensing Enclosure: IEC IP54 Operating Temp.: -20°C to +60°C Humidity: 5% to 95%, no condensed Dimensions: 285mm<em>205mm</em>77mm Weight: 1.5KG Application software interface: Provide API SDK, Demo in VC and VB, JAVA</td>
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</table>

Application: logistics, access control, parking management, manufacturing control and etc. Frequency range: 902-928MHz (or customized) FM mode: FHSS or fixed frequency, set by the software RF output: 30dBm adjustable, 50Ω load Communication interface: LAN, RS232, RS485, Wiegand 26/34 Communication rate: serial port 9600~115200bps, RJ45 10Mbps GP I/O interface: 12 pin + 4 pin Power dissipation: average <10W Application software: provide with API SDK, VC, VB, JAVA application routines Reading distance: 6~10m equipped with 9dbi antenna
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| VI-86E UHF RFID Integrated Reader | ![VI-86E UHF RFID Integrated Reader](image) | - This reader can read and write for ISO-18000-6B, ISO-18000-6C (EPC Gen2), TK900 standard RFID TAGS. Integrated with antenna and reader, easy to install. Apply for vehicle access management, ETC, personnel access management, electronic security, logistics monitor, production automation management and other industry. | - Tag air interfaces: EPC Gen2, UHF ISO-18000-6C, ISO-18000-6B
- Frequency ranges: 902~928MHz (customize for your requirement)
- Work style: For FHSS or fixed frequency
- Antenna: built-in 12dbi antenna
- RF power control: 20-30 dBm
- 12dbiantenna, Read distance 5~18M (Tags dependent)
- Work mode: Auto, Command, trigger
- Communication interface: LAN, RS232, RS485, Wiegand26/34
- Communication rate: Serial port rate 9600~115200bps, RJ 45 is 10Mbps
- GP I/O Interface: I/O Interface (12 needle + 4 needle)
- Power: External 220V AC, +9V/3A DC adapter
- Consumption: Average Power < 15W
- Non-condensing Enclosure: IEC IP65
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<tr>
<td>VF-82 UHF RFID Mobile reader</td>
<td>Warehouse management for forklift, assets tracking</td>
<td>Tag air interfaces: EPC global UHF ISO-18000-6C (EPC G2), ISO-18000-6B, TK900 standard&lt;br&gt;Frequency ranges: 902～928MHz (customize for your requirement)&lt;br&gt;Work style: For FHSS or fixed frequency&lt;br&gt;Antenna connector: 4 SMA (female) antenna ports&lt;br&gt;RF power control: 20～30 dBm&lt;br&gt;2diantenna: Read distance1-3M (Tags dependent)&lt;br&gt;Communication interface: LAN, RS232, RS485, Wiegand 26/34, Bluetooth: IEEE802.15&lt;br&gt;Tag air interfaces&lt;br&gt;Communication rate: Serial port rate 9600～115200bps, RJ 45 is 10Mbps, Bluetooth rate: 1Mbps&lt;br&gt;Reliable firmware update: extensible upgrade mechanism&lt;br&gt;Power: Match 220V AC quickly charger, can rechargeable lithium battery 3.0Ah (18V)&lt;br&gt;Consumption: Average Power&lt;20W&lt;br&gt;Non-condensing Enclosure: IEC IP52&lt;br&gt;Operating Temp.: -20 °C to +60 °C&lt;br&gt;Humidity: 5% to 95%, no condensed&lt;br&gt;Dimensions: 190(L)*177 (W)*75(H) mm&lt;br&gt;Weight: 1.5KG</td>
<td>Operating Temp.: -20 °C to +60 °C&lt;br&gt;Humidity: 5% to 95%, no condensed&lt;br&gt;Dimensions: 445<em>445</em>70 mm&lt;br&gt;Weight: 5KG&lt;br&gt;Application software interface: Provide API SDK, Demo in VC and VB, JAVA</td>
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| VD-67 UHF RFID Desktop Reader/Writer | ![VD-67 UHF RFID Desktop Reader/Writer](image) | Assets tracking, inventory | **Application software interface**: Provide API SDK, Demo in VC and VB.JAVA  
**Tag air interfaces**: ISO-18000-6B, ISO-18000-6C (EPC G2), TK900  
**Communication interface**: USB  
**Frequency ranges**: 902~928MHz (Customize for your requirement)  
**Work style**: For FHSS or fixed frequency  
**Antenna connector**: Inbuilt antenna  
**Read distance**: Inbuilt antenna, Read distance>30mm, write distance>10mm  
**Power**: Use USB interface, don’t need external power  
**Weight**: 90g  
**Dimensions**: 115mm*82mm*25mm  
**Support**: USB1.1 Interface, virtual serial ports work model, USB model without driver program, USB simulation keyboard mode, and output format and parameters can be customize under simulation keyboard. Provide dynamic-link libraries (DLLS), support secondary development. |
| VH-770 UHF RFID Handheld Reader | ![VH-770 UHF RFID Handheld Reader](image) |  | **Protocol**: EPC Class1 Gen2/ISO18000-6C  
**CPU**: High speed ARM platform, main frequency 450MHZ  
**OS**: Microsoft® Windows CE 6.0  
**RAM**: 128MB  
**Memory card**: 2G Micro SD (standard configuration), support 32G at max. |
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<td><strong>Barcode module options:</strong></td>
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<td>1D module: Symbol SE955;</td>
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<td>2D module: Honeywell 5180 (optional)</td>
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<td>WiFi: WLAN 802.11 b/g (standard configuration)</td>
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<td>Extend module: GPRS module, 2.45G module (optional)</td>
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<td>Communication interface: USB Slave</td>
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<td>Audio: Typhoon, support multi-media function</td>
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<td>Dimension: 183mm<em>81mm</em>146mm</td>
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<td>Weight: 703g (excluding charging base)</td>
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<td>Key: 27 keys</td>
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<td><strong>Display &amp; physical parameter</strong></td>
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<td>Screen: 3.2 inch TFT LCD (240*320), resistive touch screen</td>
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<td>Battery: Rechargeable lithium polymer battery (3500mAh @ 7.4V)</td>
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<td>Operation temperature: -20°C ~ +50°C</td>
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<td>Storage temperature: -30°C ~ +70°C</td>
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<td>Humidity: 5% ~ 95% non-condensing (25°C)</td>
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<td>Accessories: 9V/1A charging base, USB cable</td>
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<td><strong>Frequency parameter</strong></td>
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<td>US: 902 ~ 928MHz</td>
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<td>EU: 865 ~ 868MHz, other standard can be customized</td>
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<td>Read distance: 7 meters at max. (tag dependent)</td>
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<td>Write distance: 3 meters at max. (tag dependent)</td>
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| VH-770AT UHF RFID Handheld Reader | | Assets tracking, inventory | **Handheld parameter**<br>Smart handheld: InFocus310<br>Processor: MT6589 4-core 1.5GHz<br>Internal memory: 1GB<br>OS: Android 4.2<br>Storage: 4GB (can be extended to 32GB)<br>Screen: 4.7"HD 1280x720 (capacitance screen, multi-point touch screen)<br>Wi-Fi: IEEE 802.11b/g/n<br>Network type: WCDMA,GSM<br>Bluetooth: 4.0<br>GPS navigation: A-GPS<br>SIM card: Micro SIM card<br>Power battery: 3.8V 2350mAh | | **RFID module parameter**<br>Data transmission: USB interface<br>Communication protocol: User-defined<br>RFID module: UHF<br>Barcode module: 1D (optional), 2D (optional)<br>Power battery: Li-polymer rechargeable battery 6800mAh, 3.8V<br>Accessories: 5V/1A charger, USB-Mini 5 pin data line | **UHF parameter**<br>Frequency: 902MHz~928MHz, 865MHz~868MHz<br>Protocol: EPC C1 G2(ISO18000-6C)<br>Reading distance: About 10m or more (depends on tag) | **Physical parameter**
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| VH-70A UHF RFID handheld reader | ![Image](image-url) | Asset tracking | Net weight: 615g  
Dimension(mm): 190×82×148  
**Environmental parameter**  
Operating temperature: -10 ℃~50 ℃  
Storage temperature: -20 ℃~70 ℃  
Storage humidity: 5%~95%, non-condensation  

**Features**  
The processor:  Cortex A9 1GHz  
Memory capacity:  ROM - EMMC 32Gb, RAM - LPDDR2 4Gb  
The operating system:  Android 4.03  
Wireless communications:  
GPRS (option) - GPRS, EDGE , 4-band 900/1800, 850/1900  
WCDMA (3G, option) - band 850/2100, Cat.8 HSDPA Cat.6 HSUPA  
WIFI (standard) - Conform to the IEEE 802.11b/g  
Bluetooth (option) - Conform to the Bluetooth 4.0  
Display: 4.3”IPS display, The resolution of the 480*800, Gabo Lingual perspective, the sun is visible  
Touch screen: Support more capacitive touch;  
Indicator light: Network indicator light, charge indicator;  
Audio:  Support the speech;  
Micro SD card:  Support 32 gb MICRO SD card;  |
<table>
<thead>
<tr>
<th>Vanch Brand Model</th>
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</tr>
</thead>
</table>

**Data security:** Product is the data security protection, in a completely off electricity (remove the battery and the power converter), data is not lost.

**GPS indicators:**
- Channel: channel 12
- Receive types: L1, C/A code and carrier phase smoothing
- Re-capture: < 1 s
- The latest ASIC chip; A squadron of patent algorithms;
- EVEREST multipath suppression technology
- Error range: <= 10 meters

**Navigation map:** Support navione, baidu, Google, gold and other navigation map;

**The input method:** Full-screen handwriting, half screen handwriting, strokes and pinyin, Numbers, letters, symbols

**Physical interface:** High-speed USB2.0 interface equipment end, 3.5 stick related plug-in interface

**camera (option):** The rear 5 million pixel camera with flash;

**The flashlight:** Low power consumption LED lights lighting, emergency use;

**1D barcode (SE4500/N431X)**
- Read distance: 0 cm ~ 50 cm
- Read rate: First read rate of 99% or more, the error rate of 0.01% or
<table>
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<tbody>
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<td></td>
<td></td>
<td></td>
<td>less, false reject rate is 0.01% or less</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td><strong>2D barcode</strong></td>
</tr>
<tr>
<td>Moto-SE4500:</td>
<td></td>
<td></td>
<td>Hardware decoding, the decoding speed and error rate of 0.01% or less;</td>
</tr>
<tr>
<td>Honeywell-5180:</td>
<td></td>
<td></td>
<td>Hardware decoding, the decoding speed and error rate of 0.01% or less;</td>
</tr>
<tr>
<td><strong>RFID</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>UHF (915MHz) :</td>
<td></td>
<td></td>
<td>More than 1m distance for EPC C1 GEN2 / ISO18000-6 - c protocol of 900 MHZ tag read operation (associated with tags and antenna)</td>
</tr>
<tr>
<td>HF (13.56MHz) :</td>
<td></td>
<td></td>
<td>0 ~ 7 cm range for ISO15693, ISO14443 double deal 13.56 MHz tags for reading and writing (associated with tags and antenna)</td>
</tr>
<tr>
<td>LF : 125 K / 134.2 K animal ear tag;</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PSAM : Support two PSAM card;</td>
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<td></td>
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<tr>
<td>HF (CPU card read) : Support the CPU card read and write, used with PSAM;</td>
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<tr>
<td><strong>Active in close communication (option)</strong></td>
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</tr>
<tr>
<td><strong>Active 2.45 G</strong> : Distance is 200 m, 200 m label can be read all at once;</td>
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<tr>
<td><strong>433M</strong> : Read more than 200 m distance, distance is adjustable;</td>
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<tr>
<td><strong>Battery performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>The battery</strong> :</td>
<td></td>
<td></td>
<td>4000 mah lithium polymer battery, standby time: more than 150 hours, working time: more than 8 hours, ac adapter charging (1 a)</td>
</tr>
<tr>
<td><strong>The battery standby time</strong> : After a full charge, the wireless</td>
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<tr>
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<td>Picture</td>
<td>Application industry</td>
<td>Specification</td>
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</tr>
<tr>
<td>VH-70F UHF RFID Handheld Reader</td>
<td></td>
<td>Assets tracking</td>
<td>communication function on standby, after 60 hours, can run normally</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Battery charging time:</strong> Charging time &lt; 4.5 hour</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Charging time More than 8 hours (once charging)</td>
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<td></td>
<td></td>
<td></td>
<td><strong>The work environment</strong></td>
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<td></td>
<td></td>
<td></td>
<td><strong>Operating temperature:</strong> -20℃ ~50℃</td>
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<td></td>
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<td></td>
<td><strong>Storage temperature:</strong> -20℃ ~70℃</td>
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<td></td>
<td><strong>Relative humidity:</strong> 10%~90%RH, non indensity</td>
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<td></td>
<td></td>
<td></td>
<td><strong>Protection grade:</strong> IP65</td>
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<td></td>
<td></td>
<td></td>
<td><strong>Physical parameters</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>The total weight:</strong> Less than 300g (including battery, charger are not included):</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td><strong>The fuselage size:</strong> 148 (L) x 77.5 (W) x 27 (T) ± 2 mm</td>
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<td></td>
<td></td>
<td></td>
<td><strong>The attachment</strong></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Standard 1 1 lithium battery, charger, USB data line</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Hardware parameter,</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Dimensions:</strong> 200 (L) mm * 89(W)mm * 46(H) mm (standard battery)</td>
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<td><strong>Microprocessor:</strong> SAMNSUNG 400 MHz</td>
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<td><strong>RAM:</strong> 128M RAM/128M ROM</td>
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<td><strong>Inbuilt optional modules:</strong> HF frequency, UHF frequency, one dimensional, two dimensional barcode</td>
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<td><strong>Random memory card:</strong> users can access to UART slot (with safety cover), support SAM card, SIM card, TF card</td>
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<tr>
<td></td>
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<td></td>
<td><strong>Screen:</strong> 3.5 color inches QVGA screen, TFT-LCD, 65K, 240(W)×320(L) (QVGA dimensions)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td><strong>Key:</strong> 28 pcs soft silicone button,5 pcs one-time operation function keys, and personalized design denis sassou-ngueso scan button</td>
</tr>
<tr>
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<tr>
<td></td>
<td></td>
<td>Main battery: charging polymer battery (3.7 V, 3200 mAh), standby time: 150 hours, one time charge scanning number: 5000 times. Extended battery capacity: optional charging polymer battery (3.7 V, 4400 mAh). Input methods: standard handwritten pen, can choose multiple input methods. Audio: speaker, receiver, full-duplex recording and play (stereo) software support. Indicator light: wireless transmitting/receiving, scanning, Power/charging, four state LED indicator light color. Weight (including standard battery): 400 g.</td>
<td></td>
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</table>

**Operation environment:**
Operating system: Microsoft Windows CE 5.0 (multilingual). Develop language: WINCE environment, Provide secondary SDK support C#, vb.net, VC++ and so on many kinds of software development language.

**Data communication:**
WWAN wireless communication: GPRS/GSM (ISO900, ISO1800 and ISO1900Mhz). WLAN wireless communication: WIFI, accord with IEEE802.11b (transmission rate 11M/second, ), IEEE802.11g (transmission rate 54M/ second) Inbuilt antenna; Bluetooth: Bluetooth IEEE802.15 tag air interfaces, Bluetooth rate is 1Mbps, II.v1.2s.

**Other:**
Drop specification: during operating temperature range, 6 faces all
<table>
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|                   |         |                      | can support impact from 1.5 M high dropped to cement floor.  
Rolling specifications: 1000 times 0.5 M, six surfaces rolling.  
Non-condensing Enclosure: IP65  
Operating Temp: -20°C to 50°C; Storage Temp: -25°C to 70°C  
Humidity: 5%RH – 95%RH (no condensed)  
**Data acquisition function:**  
**UHF module:**  
Frequency ranges: 902 - 928 or 865-868 MHz (customize for your requirement)  
Accord with standard: ISO-18000-6B、ISO-18000-6C（EPC G2）  
Antenna gain: 0.5dB  
Antenna: Microstrip antenna  
Read distance: ≤1.5M, Write distance:>0.2M  
RF power control: 20-30dBm  
**HF module:**  
Tag air interfaces:ISO15693,ISO14443 Type A、Type B  
Interface: RS232  
Frequency:13.56MHz |
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</thead>
</table>
| **VH-75**  
UHF RFID Handheld Reader  
(with Android app) | ![Image of VH-75](image) | Assets tracking | Frequency ranges: 902 - 928 or 865-888MHz (customize for your requirement)  
Tag air interfaces standard: ISO-18000-6B, ISO-18000-6C (EPC G2)  
Work style: For FHSS or fixed frequency;  
Output power: Max 30dBm (can change);  
Read distance>200cm, write distance>20cm;  
Power: charging polymer battery (3.7V, 3200 mAh), standby time: 150 hours, one time charge scanning number: 5000 times  
Communication interface: USB1.1, Bluetooth IEEE802.15 tag air interfaces, Bluetooth rate is 1 Mbps  
Memory card: 2G (MiniSD)  
Dimensions: 180(L) * 55(W) * 30(H) mm  
Operating Temp: -20℃ to 50℃; Storage Temp: -25℃ to 70℃  
Humidity: 5% RH ~ 95% RH (no condensed)  
Weight: 250G |
| **VX-3/M**  
antenna Multiplexer | ![Image of VX-3/M](image) | VX-3 / M is a High performance UHF multiplexer, and is initiative middleware hardware product in domestic, the patent design is ZL2010 2 0593038.1. It can support up to 32 unit slave multiplexer and 256 unit antenna, and also can provide the antenna connection status in real time. Therefore; the RF signal from one output port (reader) can be switched to any of the 256 unit antenna. This item is best choice for the intelligent shelves, | Frequency ranges: 860 - 960 MHz  
RF input: 1 SMA RF output interface  
RF output: MCX RF output interface OUT1~OUT8  
Communication interface: TCP/IP network interface  
Power: External 220V AC, +12V/3ADC adapter  
Connection way: physical connection is simple, slave multiplexer get the power from Master multiplexer via RF cable, without additional power supply, 8 units MCX output interface, every interface support 4 slave multiplexer, and also connect to antenna directly  
Every slave multiplexer is can connect to 8 units antenna at most, so |
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<th>Specification</th>
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<tbody>
<tr>
<td></td>
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<td>intelligent bookshelf for Books or files</td>
<td>one main multiplexer output interface can connect to 32 units antenna. Status: When connect to power supply, this item automatic inquires on slave multiplexer and antenna connection status, and support the current connection dynamic update; Maximum support 256 units antenna switching, and antenna switching speed is less than 100 ms.</td>
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<td></td>
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<td></td>
<td>Dimensions: 200mmx105mmx28mm</td>
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<td></td>
<td></td>
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<td>Weight: 550G</td>
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<tr>
<td>Vanch Brand Model</td>
<td>Picture</td>
<td>Application industry</td>
<td>Specification</td>
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</tr>
<tr>
<td>VC-420</td>
<td><img src="image" alt="Picture" /></td>
<td>RFID portal reader is whole system based on reader, antennas; EAS alarm system, power and other devices. When the goods with RFID tag go through this channel, the antenna read tag information and transfers to the reader in real-time time and in order to achieve the goods or personnel control management purpose. Apply to warehouse asset management, clothing industry, book files, access control channel attendance, production process control and other high flow rate applications and also work flow control, and so on.</td>
<td>Tag air interfaces: EPC global UHF ISO-18000-6C (EPC G2)、TK900 standard Frequency ranges: 902～928MHz (customize for your requirement) Work style: For FHSS or fixed frequency Antenna connector: 4 units SMA antenna ports, 7dbi circular polarized antenna, antenna’s height can be adjustable. RF power control: 20～30dBm can change 7dbiantenna, Read distance 1.5～3M (tags dependent) Communication interface: LAN、RS232、RS485、Wiegand26/34 Communication rate: serial port rate 9600～115200bps, RJ 45 is 10Mbps Reliable firmware update: extensible upgrade mechanism GP I/O Interface: I/O Interface (12 needle + 4 needle) EAS triggered alarm: 3 seconds audible reminder Power: External 220V AC Consumption: Average Power &lt;20W Non-condensing Enclosure: IEC IP51 Operating Temp.: -20℃ to +60℃ Humidity: 5% to 95%, no condensed Dimensions: 180(H) * 35(W) * 20(H) CM Weight: 20KG Application software interface: Provide API SDK, VC and Demo in VB,JAVA application</td>
</tr>
<tr>
<td>Application industry</td>
<td>Specification</td>
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<tr>
<td>- Print on RFID labels</td>
<td>Print mode: direct thermal/thermal transfer</td>
<td></td>
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<tr>
<td>- Encoding for UHF RFID labels</td>
<td>Resolution: 300dpi, 12 dots/mm</td>
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<td></td>
<td>Max. print speed: 8 inch/sec, 254mm/sec</td>
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<td></td>
<td>Print width: 4.1 inch, 104mm</td>
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<td></td>
<td>Tag width: 4.6 inch, 118mm</td>
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<td></td>
<td>Tag high: 0.25<del>32 inch, 6.4</del>812mm</td>
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<td></td>
<td>Paper roll outer diameter: 8 inch, 200mm, length 100~150m</td>
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<td></td>
<td>Paper roll inner diameter: 1-3 inch, 25.4~76.2mm</td>
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<tr>
<td></td>
<td>Ribbon roller outer diameter: 3.4 inch, 86.5mm, length 300~450m</td>
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<tr>
<td></td>
<td>Ribbon inner diameter: 1 inch, 25.4mm</td>
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<td></td>
<td>Roll type: roll inside or outside</td>
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<td></td>
<td>Ribbon type: WAX, WAX/RESIN, RESIN</td>
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<td>Paper locating: double sensors, lead fixed sensors, rear movable sensor</td>
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<td></td>
<td>Tension balance: ARCP tension balance structure</td>
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<td>Communication port: RS232C, USB1, USB2</td>
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<td></td>
<td>RF-enabled: standard UHF module or HF module, support mainstream RFID chips data protocol</td>
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<tr>
<td></td>
<td>Memory capacity: RAM memory 16MB(1MB for User), Flash(nv) memory 4MB(1MB for User), total 20MB</td>
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<td></td>
<td>Standard model: VANCH VPR0207 UHF single user</td>
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<td>Customization model: according to user application needs</td>
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<tr>
<td></td>
<td>Machine size: 10<em>19</em>10 inch, 255<em>480</em>253mm</td>
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<tr>
<td></td>
<td>Weight: 13.8kg (32LBS)</td>
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<tr>
<td></td>
<td>Operating temp.: +5~+40℃</td>
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