万全 VANCH

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VH-D25 long-range RFID handheld terminal

Product Introduction:

RFID has excellent performance and can easily meet the application needs of multiple scenarios!

- **Unique anti-collision algorithm:** maximum group reading recognition speed reaches 950 pieces/second, recognition distance 0-20m;
- **Convenient parameter setting:** one-click switching of long-distance, multi-label reading, multi-label reading and other recognition modes;
- **Supports special label reading such as temperature, LED, UPC, etc.;**
- **Unique object search algorithm, accurate search for specified items.**

More technologies and designs to ensure efficient operation!

- **New platform, eight-core powerful performance is fully released:**

Qualcomm octa-core 2.0GHz/Android11, multiple applications can run smoothly;

- **Wi-Fi 6 escort, fast transmission and wider coverage:**

The maximum rate can reach 1.2Gbps, which is 39% higher than Wi-Fi 5. The network capacity utilization rate is increased by 2-3 times. Concurrent data of multiple applications can be enhanced roaming without queuing. The performance is improved by 70%, and the packet loss rate is as low as 1-2%.

- **Dual batteries with large capacity, no more worries about battery life：**

5000mAh host + 6700mAh handle dual battery design to help long-term battery life

- **Ultra-high protection, no fear of using in harsh environments:**

IP67 dust and water resistance + 2m drop protection

Product Advantages:

- Built-in Impinj's new generation E710 engine, with more powerful performance;
- 5dBi high-sensitivity antenna with unique anti-collision algorithm, maximum group reading and recognition speed reaches 1300 times/second;
- 1-33dbm precise step control, recognition distance 0-20m, easily meet the needs of tag collection at different distances;
- Convenient and efficient scenario-based parameter configuration, one-click to achieve optimal recognition performance in complex scenarios.

Specifications:

Purchase code (product model)	VH-D25
Performance Parameters	
CPU	Octa-core 2.0GHz
Operating system	Android 12
Storage	4GB+64GB (optional 8GB+128GB)
Card slot	SIM+TF
User storage expansion	Micro SD Card, up to 256GB compatible
Interface/communication	Waterproof Type C USB interface, supports USB2.0 HighSpeed, supports OTG.
Keyboard	Power+Volume (+, -) +UHF+SCAN+Custom+Handle Button
Display screen	5.5-inch display, capacitive touch
	1440(H) ×720(W)
power supply	6700mAh replaceable handle
	Type C USB port at the bottom, supports MTK PE2.0 charging;

Notification method	Sound, vibrator, LED light indication
Audio	Built-in single speaker, built-in dual microphones (with noise reduction function)
Sensor	G-sensor, light sensor, distance sensor, electronic compass, gyroscope
Dimensions	170(H)*80(W)*132.7(T)mm (16.4mm)
Weight (including standard battery)	580g (including battery)
Operating temperature	-20℃ to +50℃
Storage temperature	-40℃ to +60℃ (including battery) -40℃ to +70℃ (excluding battery)
Humidity	5% to 95% RH non-condensing state
Industrial grade for water and dustproof	IP67
Drop rating	2 meters
Electrostatic discharge (ESD)	±15kV air discharge, ±8kV direct discharge
Power supply	Working voltage DC9~24V
Power consumption	Maximum power consumption 3W, maximum starting current 1A
Communication harness	Industrial connection tail line one to five
Weight	About 1.5 kg (complete set)
Humidity	5% ~ 95%, non-condensing
Protection level	IEC IP67
Operating temperature	-40ºC ~ +85ºC
Storage temperature	Normal temperature
Data acquisition function parameters	
Function 1	2D image scanning engine
Optical resolution	1080 x 1280 pixes
Up and down tilt viewing angle	±60° deviation from normal angle
Left and right offset viewing angle	±55° deviation from normal angle
Laser safety level	Class II

Image frame rate	60fps
Support symbols	1D： UPC/EAN, UPC/EAN , Code128, GS1-128, Code 39,Code 93, Code11, Matrix 2 of 5, Interleaved 2 of 5, Codabar, MSI ,Code11,etc. 2D： PDF417, MicroPDF417,Data Matrix, Maxicode, QR Code,MicroQR, Aztec,etc.
Lighting, projection	Warm light, laser projection
Minimum print contrast	20%
Function 2	Rear camera image acquisition
Maximum resolution	4224*3136
Pixels	13 million
Photo function	PDAF phase focus
Flash + fill light	Support
Function 3	Front camera image acquisition
Maximum resolution	2592*1944
Pixels	5 million
Photo function	Fixed focus
Function 4	GPS location information acquisition
Positioning system	GPS+GLONASS+Beidou, supports AGPS
Frequency	GPS: L1/L5; Beidou: B1; GLONASS:L1/L5
Accuracy	5m-10m
Wireless data communication function parameters	
Function 1	Wireless LAN WIFI
Protocol	IEEE 802.11 a/b/g/n/ac
Frequency range	Depending on the country (region), 2.4GHz is 2.412GHz - 2.472GHz; 5GHz is 5.180GHz - 5.825GHz
Working channel	CH1~CH13, CH36-CH140, CH149~CH165
Safety	Support WPA2 -Personal, WPA2 -Enterprise, EAP-TLS, EAP-TTLS /MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC , EAP-SIM, EAP-AKA, EAP-AKA Prime

Feature 2	Wireless WAN
Frequency	GSM : Qual Band(850/900/1800/1900Mhz) TD-SCDMA : Band34,Band39 WCDMA: Band1 , Band5 , Band8 CDMA 1x /EVDO : BC0 TDD-LTE: Band34 , Band38 , Band39 , Band40 , Band41 FDD-LTE: Band1 , Band3 , Band 5 , Band7 , Band 8 , Band20 , Band28
Feature 3	Wi-Fi NFC
Readable and writable tags	Supports ISO15693, ISO14443A/B (without encryption protocol), supports NFC protocol
Operating frequency	HF band 13.56MHz
Reading distance	ISO15693 typical value is greater than 5cm, ISO14443A typical value is greater than 4cm, ISO14443B typical value is greater than 1.5cm (related to the tag)
RFID Function Parameters	
Function 1	RFID Read/Write (UHF)
RFID module	VM-R61E Impinj E710
Readable and writable tag	Compliant with ISO-18000-6C/EPCC1G2
Antenna parameters	5dBi circular polarization, default is 902-928MHz
Operating frequency	860-930MHz (Customized according to national and regional regulations), default is 902-928MHZ
Operating mode	Works in wide spectrum frequency hopping (FHSS) or fixed frequency transmission mode
Output power	1~33dBm
Reading distance	≥20m @9662 white card (practical distance is affected by the tag and environment)
Write distance	0~6m@9662 white card (practical distance is affected by the label and environment)
Group read speed	Up to 900 cards/second@Impinj H47 (actual distance is affected by the label and environment)
Card read speed	Average reading time per word (32 bits) 12ms
Card write speed	Average writing time per word (32 bits) 60ms
Power consumption	Average power <8W
Third-party application development support	
System software	Android 12

System programming environment	Eclipse, Android Studio

External devices and accessories

Standard accessories	Power adapter × 1, Type C data communication cable × 1
Optional accessories	Complete single-unit charger, battery quadruple charger, handle battery

Product packaging diagram: