



**YidaScan WS22-2D**

**2D Wireless Bluetooth Barcode Scanner**

**Specification**

## **Disclaimer**

Please read through the manual carefully before using the product and operate it according to the manual. It is advised that you should keep this manual for future reference.

Do not disassemble the device or remove the seal label from the device, doing so will void the product warranty.

All pictures in this manual are for reference only and actual product may differ. The information contained herein is subject to change without prior notice.

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## **Service**

If you need more technical support, please call or email us. Visit our website to learn more: [www.yidascan.com](http://www.yidascan.com)

## Version

Version	Description	Date
V1.0	Initial Version	2021-06-10
V1.1	Add Vibration Feature	2021-12-16
V1.2	Add Dimension Diagram	2022-04-20
V1.3	Add Wire Diagram	2022-06-16

## Content

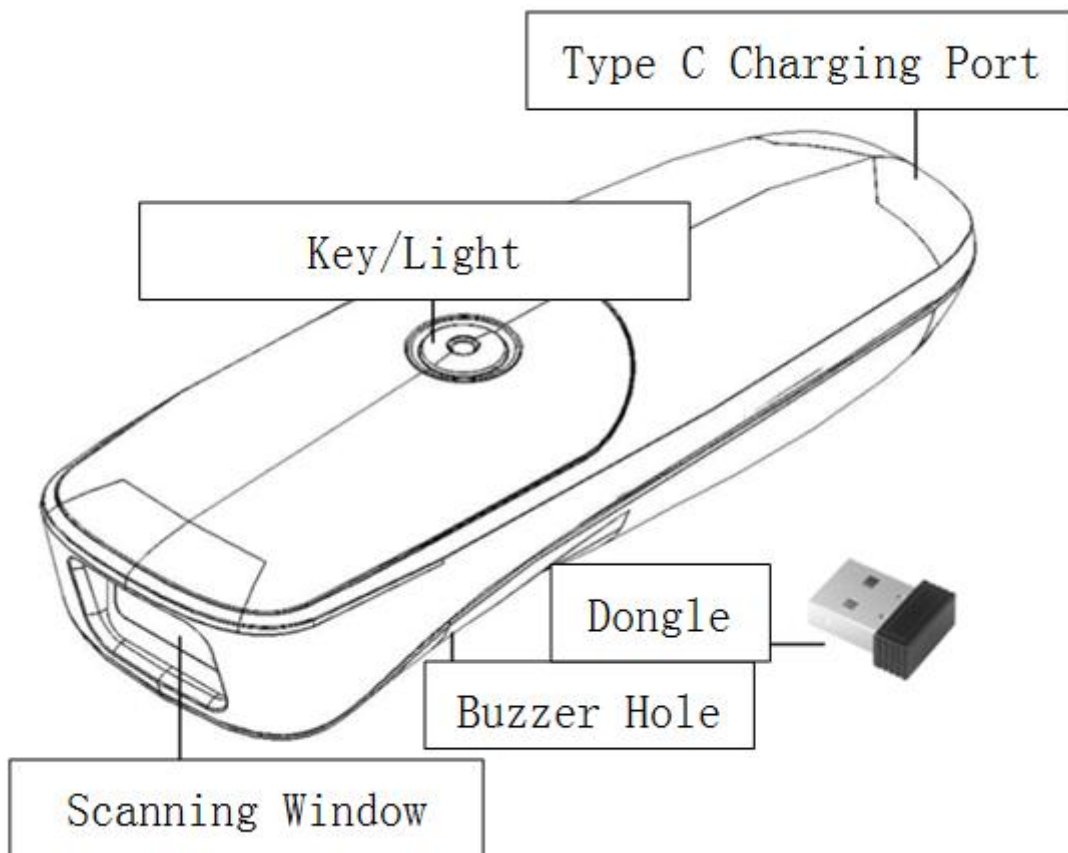
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## **Introduction**

WS22-2D is a 2D barcode scanner with high performance. It can easily read barcodes on media such as paper, commodities and screens with excellent reading performance. This product adopts enhanced wireless 2.4G transmission technology, the effective distance of outdoor open environment can reach more than 60 meters, and can support both wired and wireless Bluetooth transmission methods. It can be used in mobile payment, commodity barcode scanning, and inventory inventory.

## Appearance

The following picture shows the appearance of WS22-2D. There are LED and key on the top. There is a scanning window on the front for scanning barcodes, a charging port and lanyard position on the rear, a buzzer hole and sticker label on the bottom.



【WS22-2D Appearance】

### Attention:

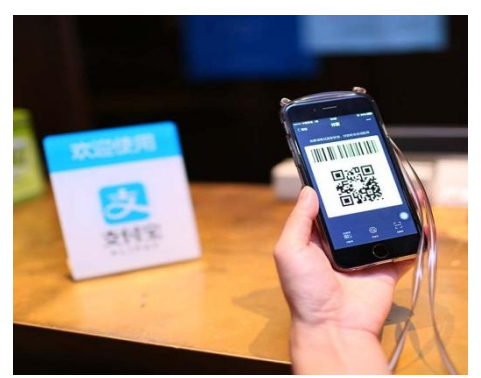
- > In order to maintain the excellent reading performance of the scanner, please keep the product clean.
- > Please use soft cloth to clean the window. Do not spray any liquid on the window.

## Product Features

- >It is anti-drop and anti-vibration with highly integrated two-dimensional decoding structure.
- >It is beautiful and easy to use with excellent structure design.
- >It can identify all mainstream 1D and 2D barcodes in the market with high-performance MCU.
- >It can scan barcodes above 4MIL to meet daily scanning requirements.
- >It can scan barcodes on paper, printing, plastic and screen with Two-dimensional imaging technolog.
- >It uses enhanced wireless 2.4G transmission technology. The outdoor transmission distance can reach more than 60 meters, and supports wired transmission without switching.
- >It supports synchronous mode to scan and transfer. It can store more than 20,000 commodity codes with storage mode.
- >It supports online upgrade and secondary development.
- >It supports Bluetooth 4.2 technology.
- >It supports Bluetooth HID, SPP, and BLE mode, suitable for a variety of work requirements.
- >It supports virtual bluetooth mode. Do not need to install bluetooth driver.

## Application

Mobile payment, card, chain retail, express supermarket, manufacturing, warehousing, warehouse management, food traceability, electricity meter reading, asset inventory and medical.

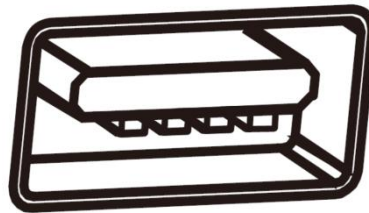




## Communication Port

The wireless scanner must be connected to a host to operate, and the host can be a PC, an Android host, or any other intelligent terminal device with a USB interface.

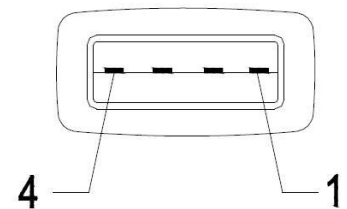
Host USB interface 【USB female】



## Wire Interface

### USB Wire Interface

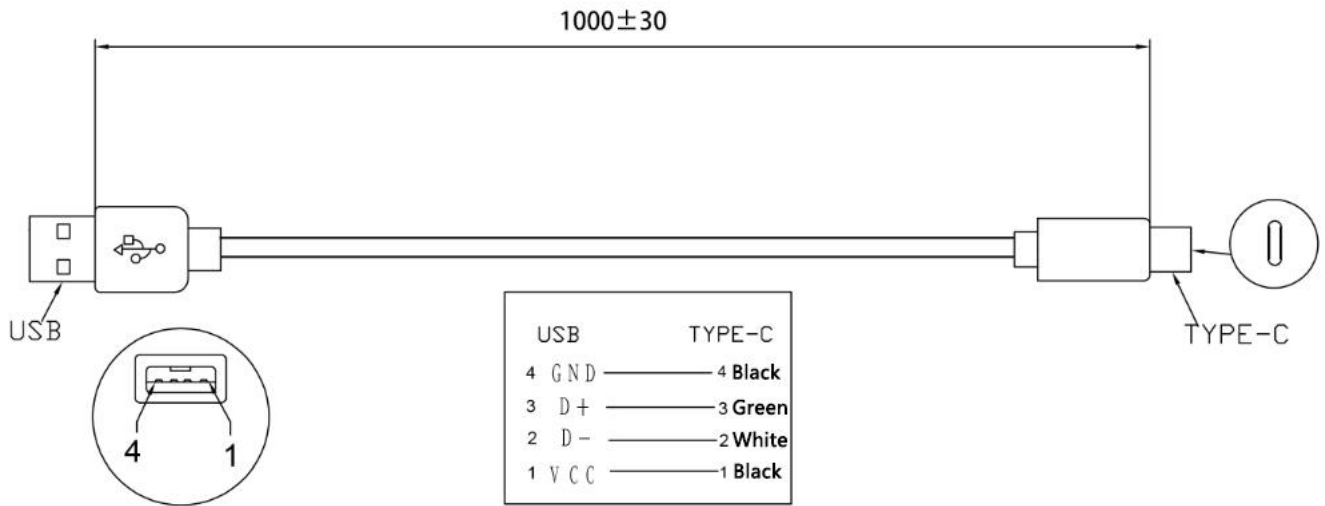
Pin No.	Function
1	Vcc
2	D-
3	D+
4	GND



## Wire Drawing

### USB (Type C)

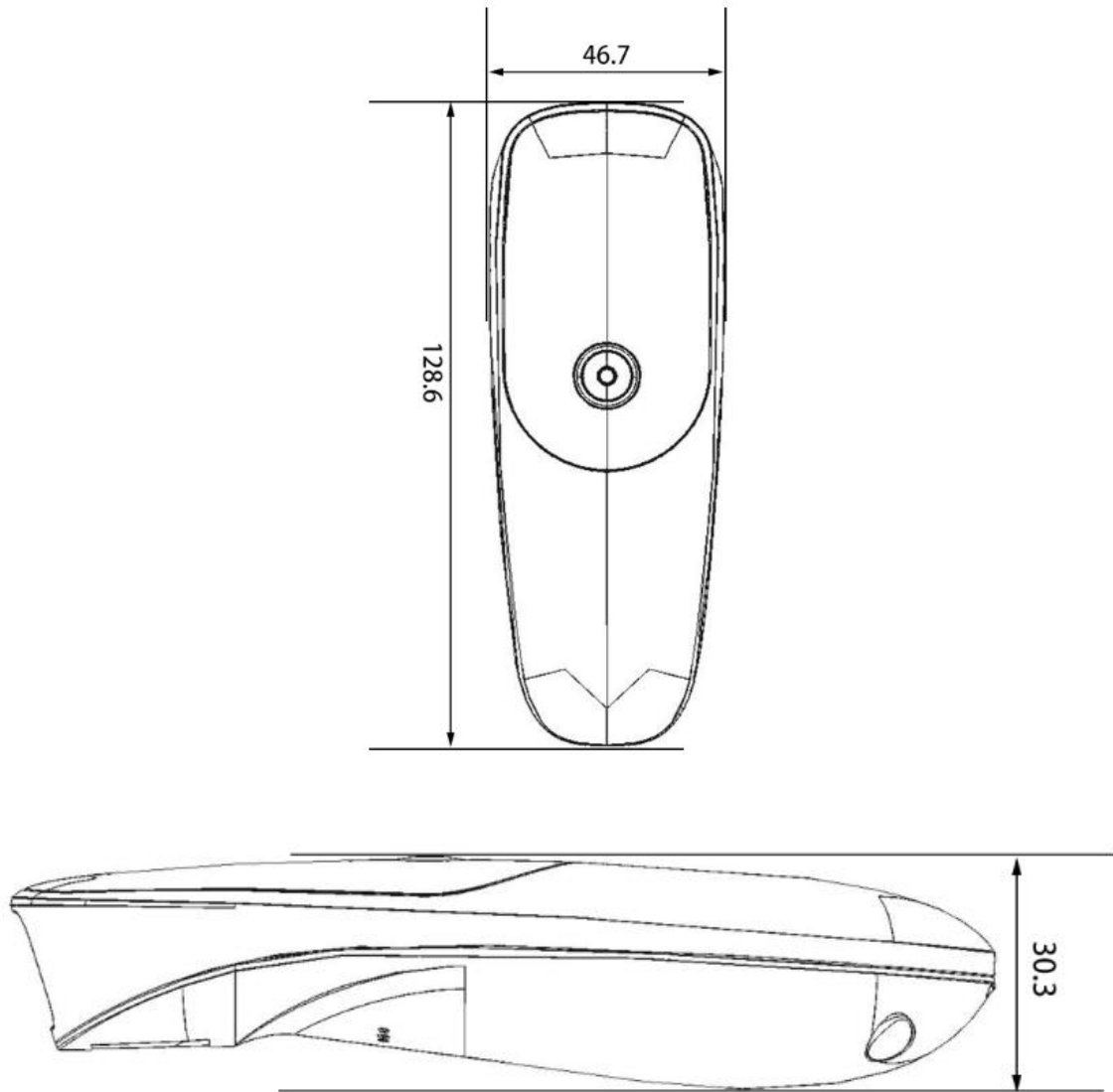
Unit: mm



Note: the USB cable can be used for charging and communication.

## Structure Dimension

Unit: mm



## Performance

Communication Mode	USB-KBW, 2.4G, Bluetooth
Sensor	CMOS
Pixel	300,000, 640*480
Reading Precision	≥4mil/0.1mm (PCS90%,CODE 39)
Light	White LED
Depth of Field	35mm~300mm
Decoding Speed	25CM/S
Reading Mode	Manual, Continuous, Induction
Prompt Mode	LED, Buzzer, Vibration
Reading Perspective	45° * 34°
Reading Angle	Roll: ±360°, Pitch:±60°, Skew: ±55° CODE39,10mil/0.25mm,PCS90% (Test Conditions)
Print Constrast	≥25%
Ambient Illumination	Dark Environment, Indoor Natural Light
Symbologies	1D: UPC-A, UPC-E, EAN-8, EAN-13, Code 128, GS1-128, Code 39, Code 32, Code 93, Code 11, Interleaved 2 of 5, Matrix 2 of 5, Industrial 2 of 5(Straight 2 of 5), Standard 2 of 5(IATA 2 of 5), Codabar(NW-7), MSI, GS1 Databar

	<p>(Omnidirectional, Limited, Expanded), China Post, etc.</p> <p>2D: QR Code, Micro QR Code, Data Matrix, PDF417, Micro PDF 417, MaxiCode, Aztec, HanXin Code, etc.</p>
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## Wireless Parameters

Wireless Communication Mode	Real Time Mode, Storage Mode
Communication Mode	2.4G, Bluetooth(HID,SPP,BLE)
Wireless Standard	2.4GHZ(ISM Frequency Band), Bluetooth 4.2
Transmit Distance	≥60meters 2.4G (Open distance); 30meters Bluetooth
Storage Capacity	350Kb (over 20,000 Product code)
Battery Capacity	1200mAh
Charging Time	About 2.5 hours(5V@1000mA)
Working Time	≥8hours
Sleeping Time	≥4 Weeks
Supported System	Windows, Mac OS, IOS, Linux, Unix, Android

## Mechanical/Electrical Parameters

Net Weight	70g (Without Cable)
Packed Weight	157g
Appearance	128.6mm(L) * 46.7mm(W) * 30.3mm(H)
Package Size	170mm(L) * 110mm(W) * 40mm(H)
Length of Wire	1.0m
Port Type	Type C
Input Power	DC 5V, 1A
Current	250mA(Work), 40mA(Standby)

## Working Environment

Working Temperature	0°C to 50°C
Storage Temperature	-20°C to 60°C
Working Humidity	5% to 95% (Non-Condensing)
Transportation	10H@125RPM

## Spare Parts List

USB Cable	Used to charging and communication with connecting scanner and host.
Dongle	Used to transmit data with host.
Operation Guide	Used for general settings.

## Depth of Filed

Barcode Type	Barcode Density	Minimum	Maximum
Code 39	0.1mm(4mil)	45mm	75mm
Code 39	0.25mm(10mil)	45mm	140mm
Code 39	1mm(40mil)	150mm	300mm
UPC/EAN	0.33mm(13mil)	60mm	160mm
QR Code	20.0mil	35mm	140mm
Data Matrix	10mil	45mm	90mm
PDF 417	6.8mil	40mm	100mm

\*\*Testing Conditions: Environment Temperature = 24°C, Ambient Light Illumination = 300LUX;

Testing Barcodes Will Be Provided By YidaScan\*\*

\*\*Notice: There will be no announcement if changing parameters\*\*

\*\*Shenzhen YIDA Auto-ID Technology Co., Ltd. has the final right to interpret this parameter\*\*