ZS-50U

Product Specification



Shenzhen Zhishun Information Technology Co., Ltd.

1、Basic Parameters

Performance Parameters	Model	ZS-50U
	Operating System	Android 11.0
	Processor	Octa-core 64-bit, 2.45 GHz
	Memory	RAM + ROM: 4 GB + 64 GB
	Expandable Memory	Micro SD card, up to 256 GB supported
Basic Specifications	Dimensions	143.3mmx169mm×90.5mm
	Weight	678g
	Display	5.7-inch color full-screen display (720 × 1440)
	Touch Panel	Supports multi-touch, glove touch, wet-hand operation, and passive stylus signature; Corning glass cover
	Main Battery	3.85 V, 9000 mAh rechargeable Li-ion battery
	Audio	1.5 W speaker, microphone (supports noise cancellation), earpiece
	Keys	Physical keys: Volume +/–, Power, 1 programmable key, 2 scan keys
	Camera	Front: 5 MP Top: 13 MP camera with flash
	Sensors	Proximity, ambient light, accelerometer, geomagnetic, gyroscope
	Scanning	Professional scan engine; supports mainstream 1D and 2D barcodes and barcodes on screens
	Card Slot Type	2 × Nano-SIM, 1 × Micro SD (expandable up to 256 GB)
Data Communication	Wireless WAN	Dual SIM, dual standby
		4G / 3G / 2G full network compatibility
	Bluetooth	BT 5.0 + BR/EDR + BLE
	Wi-Fi	2.4 GHz/5 GHz Dual-band, IEEE 802.11a/b/g/n/ac/d/e/h/i/k/r/v/w Fast roaming: 802.11r/OKC/PMKID caching; 802.11ax ready
	Positioning	Supports GPS, A-GPS, BeiDou (BDS), GLONASS, Galileo
Operating Environment	Operating Temperature	-20°°C to +60°°C
	Storage Temperature	-40°°C to +70°°C
	Humidity	5% RH to 95% RH (non-condensing)
	Drop Resistance	Withstands multiple drops from 1.2 m onto smooth concrete
	Protection Rating	IP67
	ESD Protection	Air discharge ±15 kV, contact discharge ±8 kV

2、Data Capture Function Parameters

2.1、Camera

Camera	Front
Photo Function	Fixed focus; 1080p video recording
Resolution	5 MP
Camera	**Top**
Functions	Supports flash (700 mA, torch function), auto focus, 1080p video recording
Resolution	13 MP camera

2.2、Scanning Engine

	2D
Rotation	360°
Pitch	±60°
Skew	±60°
Supported Symbologies	Linear: Codabar, Code 11, Code 128, Code 2 of 5, Code 39, Code 93 and 93i, EAN/JAN-13, EAN/JAN 8, IATA Code 2 of 5, Interleaved 2 of 5, Matrix 2 of 5, MSI, GS1 Databar, UPC-A, UPC E, UPC-A/EAN-13 with Extended Coupon Code, Coupon GS1 Code 32(PARAF), EAN-UCC Emulation, GS1 Data Bar 2D Stacked：Codablock A, Codablock F, PDF417, MicroPDF417 2D Matrix：Aztec Code, Data Matrix, MaxiCode, QR Code, Chinese Sensible (Han Xin), Grid Matrix, Dot Code Postal：Australian Post, British Post, Canadian Post, China Post, Japanese Post, Korea Post, Netherlands Post, Planet Code, Postnet

2.3、RFID（UHF）

RFID	Read/Write (UHF)
RFID Chip	Impinj E710
Operating Frequency	902–928 MHz
Protocol Standard	ISO 18000—6C (EPC C1G2 standard)
Read Range	Read range up to 20 m (depends on the tag)
Antenna Gain	Gain: 5dBi

3、Data Communication Parameters

3.1、GPS Positioning

Positioning	Positioning Parameters
Supported Modes	Supports GPS, A-GPS, BeiDou (BDS), GLONASS, Galileo
Frequency	GPS (L1 1.575 GHz C/A code), BeiDou (B1 1.561 GHz), GLONASS (L1 1.602 GHz), Galileo (E1 1.589 GHz / E2 1.561 GHz)
Cold Start Time	Less than 40 s
Max. Channels	31 channels
Sensitivity	-130dBm (SNR 40 dB-Hz)
Accuracy	5–10 m (open sky)

3.2、Wireless Communication Functions

Wi-Fi	Wireless LAN
Protocol	IEEE 802.11a/b/g/n/ac/d/e/h/i/k/r/v/w (2.4 GHz / 5 GHz dual-band Wi-Fi); IEEE 802.11ax ready
Frequency Range	2.4 GHz, 5 GHz
Operating Channels	CH1–CH13, CH34–CH140, CH149–CH165 (depending on country/region)
Security	WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA3 Personal (SAE); WPA/WPA2 Enterprise (TKIP and AES); WPA3 Enterprise 192-bit mode (GCMP-256) - EAP-TLS; Enhanced Open (OWE
Roaming	PMKID caching; Cisco CCKM; 802.11r (Over-the-Air); OKC; configurable Wi-Fi roaming threshold

3.3、Wireless WAN

Wireless WAN	WAN Communication Parameters
Communication Mode	Dual SIM dual standby
Global Frequency Bands	TD-LTE(B34/B38/B39/B40/B41) FDD-LTE(B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B20/B28A/B28B)
	WCDMA(B1/B2/B4/B5/B8) TD-SCDMA(B34/B39) CDMA2000 1x EV-DO Rev.A BC0 (800MHz)
	CDMA1x GSM/EDGE/GPRS(850/900/1800/1900)

3.4、Bluetooth

Standard	Bluetooth Parameters
Supported Modes	BT5.0 + BR/EDR + BLE
Connection Range	More than 10 m

3.5、Accessories

Accessories	Accessory Type
Standard Accessories	Battery ×1, USB cable ×1, power adapter ×1
Optional Accessories	Single-slot charging cradle, screen protector