



NEW AUTOID[®]9-9.0 SERIES HAND-HELD TERMINAL

PRODUCT SPECIFICATION V0.1



1. NEW AUTOID®9-9.0 PERFORMANCE CHARACTERISTICS

CPU	Cortex™-A53 Octa-core 1.8GHz
Operating System	Android 9.0
RAM	3GB
ROM	16GB
Expansion Slot	Micro SD Card, 32GB SDHC compatible
Interface/Communication	Industrial Mircro USB interface supports USB2.0 High Speed, supports OTG, USB supports serial port.
Keypad	17keys/22 crystal keys
	LED(buttons with backlight)
Display	4.0 inch size industrial grade low temperature resistant, Capacitive, touchable, dual mode touch-with or without a thick glove / with or without wet hand
	800(H)×480(W) (WVGA)
Power	Detachable 3.8V 4000mAh rechargeable Li-ion battery, (Built 3.7V 60mAh in li-ion backup battery and voltmeter)
	Side interface: Standard Micro USB, support quick charge, intelligent identification of PC and special charger; Bottom flap charging interface: Support quick charge, USB data transmission intelligent identification of PC and special charger
Notification	Sound, Vibrator, LED indicator
Audio	Built-in dual loudspeaker 8Ω/0.8W*2 or built-in single loudspeaker4Ω/2W, built-in microphone, 3.5mm stereo headset interface.
Sensor	Acceleration sensor, Electronic compass, Optical sensor and gyroscope
Dimension	156(H)×70(W)×22(T)mm , (it's 27mm for the scanner part)
Weight(including standard battery)	270g (battery included, varies by different configurations)
Operating Temp	-20°C to +50°C
Storage Temp	-40°C to + 60°C (Battery included)
	-40°C to + 70°C (Battery excluded)
Humidity	5% to 95% RH non-condensing
Sealing	IP67
Drop Specification	Multiple 1.5m drops to concrete across the operating temperature range
Tumble Specification	1,000 1.64 ft./0.5 m tumbles (2,000 impacts)
ESD	±15kV Air discharge,±8kV direct discharge

2. NEW AUTOID®9-9.0 DATA CAPTURE OPTIONS

Option 1	1D Laser Scan Engine (option1)
Scan Accuracy	5mil
Rotate	±35°
Pitch Angle	±65°
Skew Tolerance	±50°
Ambient Light	Sunlight: 10,000ft. Candles(107,640Lux)
	Artificial light:450ft.candles(4,844Lux)

Scan Frequency	100±10/sec
Scan Width	47°
Laser safety grade	Class II
Code Support	UPC/EAN, POST, Code 128, Code 39, Code 93, Code 11, Codabar, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, MSI, RSSI etc.
Option 2	1D Laser Scan Engine (option2)
Scan Accuracy	5mil
Rotate	±35°
Pitch Angle	±65°
Skew Tolerance	±50°
Ambient Light Immunity	Sunlight: 10,000ft. Candles(107,640Lux)
	Artificial light: 450ft. Candles(4,844Lux)
Scan Depth	17.78cm(5mil),66.04cm(15mil)
Scan Frequency	104±12/sec
Scan Width	47°/35°/10°
Laser safety grade	Class I
Code Support	UPC/EAN, POST, Code 128, Code 39, Code 93, Code 11, Codabar, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, MSI, RSSI etc
Option 3	2D Image Scan Engine (option 3)
Sensor Resolution	844(H)×640(V)
Rotate	360°
Pitch Angle	±45°
Skew Tolerance	±65°
Laser safety grade	Class II
Image frame rate	60fps
Code Support	Aztec Code, Codabar, Codablock F, Code 11, Code 128, Code 2 of 5, Code 39, Code 93, Data Matrix, EAN/JAN-13, EAN/JAN 8, EAN-UCC Composite Codes, EAN-UCC Emulation, IATA Code 2 of 5, Interleaved 2 of 5, Matrix 2 of 5, MaxiCode, MicroPDF417, MSI, PDF417, Postal Codes (Australian Post, British Post, Canadian Post, China Post, Japanese Post, Korea Post, Netherlands Post, Planet Code, Postnet), Plessey Code, PosiCode, QR Code, RSS Expanded, RSS Limited, RSS-14, TCIF Linked Code 39, Telepen, Trioptic Code, UPC-A, UPC-E etc.
Light source system	White light, laser aiming
Minimum printing contrast	20%
Option 4	2D Image Scan Engine (option 4)
Sensor Resolution	1280(H)×800(V)
Rotate	360°
Pitch Angle	±60°

Skew Tolerance	±55°
Laser safety grade	Class II
Image frame rate	60fps
Scan depth	Code128: 25.5cm(7mil),52.5cm(20mil) QR code: 10cm(10mil),34cm(20mil)
Code support	UPC/EAN, UPC/EAN , Code128, GS1-128, Code 39, Code 32, Code 93, Code11, Matrix 2 of 5, Interleaved 2 of 5, IATA 2 of 5, Industrial2 of 5,Codabar, MSI,Code11,PDF417, MicroPDF417,Data Matrix, Maxicode, QR Code, MicroQR, Aztec etc.
Light source system	White light, Red cross-shape laser aiming
Minimum printing contrast	20%
Option 5	2D Image Scan Engine (option 5)
Sensor Resolution	1280(H)×800(V)
Rotate	360°
Pitch Angle	±60°
Skew Tolerance	±55°
Laser safety grade	Class II
Image frame rate	60fps
Scan depth	Code128: 10cm(5mil),80cm(20mil)
Code support	UPC/EAN, UPC/EAN , Code128, GS1-128, Code 39, Code 32, Code 93, Code11, Matrix 2 of 5, Interleaved 2 of 5, IATA 2 of 5, Industrial2 of 5,Codabar, MSI ,Code11 etc. PDF417, MicroPDF417, Data Matrix, Maxicode, QR Code, MicroQR, Aztec, etc.
Light source system	White light, Red cross-shape laser aiming
Minimum printing contrast	20%
Option 6	GPS
Positioning system	GPS, Beidou, GLONASS(Three in one)
Frequency	GPS: L1(1.575GHz); Beidou: B1(1.561GHz); GLONASS:L1(1.602GHZ)
Maximum number of channels	31channels
Sensitivity	-130dB(SNR value as 40dBHz)
Accuracy	5-10meter(OPEN SKY)
Option 7	Camera
Maximum Resolution	3264*2448(taking photo), 1080P 60fps (making video)
Photo Function	Auto-focus
Flashlight	Support dual flashlights
Pixel	13 mega
Option 8	RFID Read/write(HF)

Standards Support	Support ISO15693,ISO14443A/B(without encryption protocol), ISO14443A tag with encryption protocol(Mifare one S50,S70 and its compatible cards); Support NFC protocol
Operating Frequency	HF frequency band 13.56MHz
Reading Range	Typical values bigger than 6cm for ISO15693, Typical values bigger than 4cm for ISO14443A , and Typical values bigger than 1cm for ISO14443B varies by different tags.
Resolution	508DPI

3. NEW AUTOID®9-9.0 WIRELESS DATA COMMUNICATIONS

Option 1	WLAN WIFI
Protocol	IEEE 802.11a/b/g/n/ac(2.4G/5G dual-frequency WIFI)
Frequency Range	Depends on different countries (regions), 2.4GHz: 2.4GHz-2.496GHz; 5GHz: 5.15GHz-5.85GHz
Working Channel	CH1~CH14, CH34-CH140, CH149~CH165
Security	OPEN,WEP,WPA/WPA2,TLS,TTLS(MS-CHAP), TTLS(MS-CHAP v2), TTLS (CHAP), TTLSMD5, TTLS-PAP, PEAP-TLS, PEAP(MS-CHAP v2)etc.
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps 802.11b: 1,2,5.5,11Mbps 802.11g: 6,9,12,18,24,36,48,54Mbps 802.11n: 6.5,13,19.5,26,39,52,58.5,65Mbps(20MHz,Long GI,800ns) 802.11n:7.2,14.4,21.7,28.9,43.3,57.8,65,72.2Mbps(20MHz,short GI,400ns) 802.11n: 6.5,13,19.5,26,39,52,58.5,65Mbps(20MHz,Long GI,800ns) 802.11n:7.2,14.4,21.7,28.9,43.3,57.8,65,72.2Mbps(20MHz,short GI,400ns) 802.11n:13.5,27,40.5,54,81,108,121.5,135Mbps(40MHz,Long GI,800ns) 802.11n:15,30,45,60,90,120,135,150Mbps(40MHz,short GI,400ns) 802.11ac:6.5,13,19.5,26,39,52,58.5,65,78Mbps(20Mhz,Long GI,800ns) 802.11ac:7.2,14.4,21.7,28.9,43.3,57.8,65,72.2,86.7(20MHz,short GI,400ns) 802.11ac:13.5,27,40.5,5481,108,121.5,135,162,180Mbps(40Mhz,Long GI,800ns) 802.11ac:15,30,45,60,90,120,135,150,180,200Mbps(40MHz,short GI,400ns) 802.11ac:29.3,58.5,87.8,117,175.5,234,263.3,292.5,351,390Mbps(80Mhz ,Long GI,800ns) 802.11ac:32.5,65,97.5,130,195,260,292.5,325,390,433.3Mbps (80MHz,short GI,400ns)
Antenna	Built-in antenna
Option 2	WWAN WCDMA (All network: 7 modes 22 frequency)

Frequency Band	GSM: Qual Band(850/900/1800/1900Mhz) TD-SCDMA: Band34,Band39 WCDMA: Band1,Band2,Band5,Band8 CDMA 1x /EVDO : BC0\BC1 TDD-LTE: Band38,Band39,Band40,Band41 FDD-LTE: Band1, Band2, Band3, Band5, Band7, Band8
Communication Rate	GPRS: DL / UL171.2kbps; EDGE: DL / UL384 kbps TD: DL 4.2 Mbps / UL 2.2 Mbps DC-HSPA+: DL 42Mbps / UL 5.76 Mbps CDMA1x: DL 153.6kbps/ UL 153.6kbps; EVDO: DL 3.1 Mbps / UL 1.8 Mbps TDD-LTE: DL 117 Mbps / UL 30 Mbps(CAT4) FDD-LTE: DL 150 Mbps / UL 50 Mbps(CAT4)
Option 3	WPAN Bluetooth
Standard	Bluetooth 4.2(Support BLE)
Power	Class II

4. NEW AUTOID®9-9.0 THIRD PARTY APP DEVELOPMENT SUPPORT

System Software	Android 9.0
System programming environment	Eclipse, Android Studio

5. NEW AUTOID®9-9.0 PERIPHERALS AND ACCESSORIES

Standard Accessories	Universal Adapter×1, USB Cable×1, Hand Belt×1, battery×1, Hand Tether×1
Optional Accessories	Single Slot Battery Charger, Four-slot Battery Charger, Single Slot Charging Dock, Single Slot Charging Dock (support ethernet), Five-slot Charging Dock, Five-slot Charging Dock(support ethernet), Grip handle, Vehicle charger rack, Vehicle charger, OTG data cable, Multifunctional bag, Grip handle bag, Touch pen, Screen protector, PDA protective casing

