AUTOID® Q7-9.0 SERIES HAND-HELD TERMINAL

PRODUCT SPECIFICATION V1.0

JiangSu SEUIC Technology Company Co., Ltd.

1. AUTOID® Q7-9.0 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	Support USB2.0 HighSpeed, support OTG
Keypad	31keys
	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	Two optional detachable 3.7V rechargeable Li-ion battery, Standard battery: Average capacity 5200mAh
	Built in li-ion backup battery
	Standard Micro USB, intelligent identification of PC and special charger; support Charging Cradle
Notification	Sound, Vibrator, LED indicator
Audio	Built-in loudspeaker, built-in dual microphone
Sensor	Standard: Optical sensor, Proximity sensor Optional: Acceleration sensor, electronic compass and gyroscope
Dimension	203(H)×72(W)×27(T)mm , (width 70mm side keys excluded)
Weight(including standard battery)	All-pass network: 390g (battery included, varies by different configurations) WIFI version: 375g (battery included, varies by different configurations)
Operating Temp	-20℃ to +50℃
Storage Temp	-40℃ to + 60℃ (Battery included) -40℃ to + 70℃ (Battery excluded)
Humidity	5% to 95% RH non-condensing
Sealing	IP65
Drop Specification	Multiple 5.8 ft./1.8m drops to marble across the operating temperature range
ESD	±15kV Air discharge,±8kV direct discharge

2. AUTOID® Q7-9.0 DATA CAPTURE OPTIONS

Option 1	1D Laser Scan Engine (option1)
Scan Accuracy	5mil
Rotate	±35°
Pitch Angle	±65°
Skew Tolerance	±40°
Ambient Light	Sunlight: 10,000ft. Candles(107,640Lux)
	Artificial light:450ft.candles(4,844Lux)
Scan Depth	Code39: 28.7cm(5mil),128.52cm(20mil),245.36cm(55mil)
Scan Frequency	104±12/sec

Scan Width	47°/35°/10°(auto focus)
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	Code39: 6.5cm(5mil),45.5cm(20mil),82.5cm(55mil)
Scan Frequency	100±10/sec.
Scan Width	47°
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 (option3)**
Sensor Resolution	844(H)×640(V)
Rotate	360°
Pitch Angle	±45°
Skew Tolerance	±60°
Laser safety grade	Class II
Image frame rate	60fps
Scan depth	Code39: 9.9cm(5mil),31cm(10mil),60cm(20mil) Data Matrix: 150cm(10mil)
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, Red cross-shape laser aiming
Minimum printing contrast	20%
Option 4	**2D Image Scan Engine (option4)**
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 corss-shape laser aiming
Minimum printing contrast	20%
Option 5	**2D Image Scan Engine (option5)**
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	**RFID Read/write(HF) (Option 7)**
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 and ID certificates.
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.
Option 12	**Camera**
Maximum Resolution	3264 * 2448 (taking photo), 1080P 60fps (making video)
Photo Function	Auto-focus
Pixel	13 mega

3. AUTOID® Q7-9.0 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: 2.412GHz-2.477GHz; 5GHz: 5.17GHz-5.825GHz
Working Channel	CH1~CH14, CH34~CH165
Security	Safe mode: legacy[3], WPA, WPA2, 802.1X Encrypted mode: WEP40/WEP104, TKIPand AES ID verification: TIS; TTIS(CHAP[3], MSCHAP, MSCHAPv2, PAP or MD5[3]); PEAP(TIS[3], MSCHAPv2, GTC); LEAP;FAST(TIS[3], MSCHAPv2, GTC) Others: Support IPv6
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**

Frequency Band	GSM: Qual Band(850\900\1800Mhz) TD-SCDMA: Band34\Band39 WCDMA: Band1\Band5\Band8 CDMA 1x /EVDO : BC0 TDD-LTE: Band38\Band39\Band40\Band41 FDD-LTE: Band1\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(Dual mode, Support BLE)
Power	Class II

4. AUTOID® Q7-9.0 THE THIRD PARTY APPLICATION DEVELOPMENT SUPPORT

System Software	Android 9.0
System programming environment	Android Studio

5. AUTOID® Q7-9.0 PERIPHERALS AND ACCESSORIES

Standard Accessories	Universal Adapter×1, USB Cable×1, Hand Belt×1, battery×1
Optional Accessories	Single Slot Battery Charger, Four Slot Battery Charger, Single Slot Charging Dock include battery (support ehernet), Single Slot Charging Dock include battery, USB cable with end flap clip, Touch pen, Vehicle charger, OTG data cable, Hand Tether