



# UTOUCH RFID HANDHELD TERMINAL

PRODUCT SPECIFICATION V0.1



## 1. UTOUCH PERFORMANCE CHARACTERISTICS

<b>CPU</b>	Cortex™-A53 Octa-core 1.8 GHz
<b>Operating System</b>	Android 9.0
<b>Memory</b>	4GB+64GB
<b>SIM</b>	Micro SIM*1 + PSAM*1
<b>Expansion Slot</b>	Micro SD Card, 128GB SDHC compatible
<b>Interface/Communication</b>	Waterproof Type-C USB, Support USB2.0 and OTG.
<b>Keypad</b>	Volume+/-, Power, 2 Side Scan Keys, Handle Trigger, 1 Custom Key
<b>Display</b>	5.2-inch Capacitive Display
	1920(H)×1080(W)
<b>Power</b>	6400mAh Detachable Li-ion battery
	Bottom Type-C USB, Support QC3.0 Fast Charge
	Support Cradle Charging
<b>Notification</b>	Sound, Vibrator, LED indicator
<b>Audio</b>	Built-In Loudspeaker(1W), Built-In Dual Microphone(Noise Reduction), 3.5mm Stereo Headset Interface
<b>Sensor</b>	Acceleration sensor, Electronic compass, Optical sensor and gyroscope
<b>Dimension</b>	156(H)×127.5(W)×79.5(T)
<b>Weight (including standard battery)</b>	480g (Battery Included, Varies by Different Configurations)
<b>Operating Temp</b>	-20°C to +50°C
<b>Storage Temp</b>	-40°C to +50°C (Battery Included)
	-40°C to +70°C (Battery Excluded)
<b>Humidity</b>	5% to 95% RH Non-Condensing
<b>Sealing</b>	IP65
<b>Drop Specification</b>	1.5m
<b>ESD</b>	±15kv Air Discharge, ±8kv Direct Discharge

## 2. UTOUCH DATA CAPTURE OPTIONS

Function 1	2D Image Scan Engine (Option 1)
Sensor Resolution	1600 (H) × 1200 (V)
Rotate	360°
Pitch Angle	±60°
Skew Tolerance	±55°
Scan Depth	5mil Code39 (9 Characters) 62-138mm; 20mil Code128 (12 Characters) 100-550mm
Image Frame Rate	15fps
Code Support	1D: UPC/EAN, UPC/EAN with supplementals, Code128, GS1-128, Code 39, Trioptic, Code 32, Code 93, Code11, Matrix 2 of 5, Interleaved 2 of 5, IATA 2 of 5, Industrial 2 of 5, Codabar, MSI, Code11, etc.  2D: PDF417, MicroPDF417, Composite Code, Data Matrix, Maxicode, QR Code, MicroQR, Aztec
Light Source System	White Light, Red Light Projection
Minimum Printing Contrast	40%
Function 1	2D Image Scan Engine (Option 2)
Sensor Resolution	1280(H) * 800(V)
Rotate	360°
Pitch Angle	±60°
Skew Tolerance	±55°
Laser Safety Grade	Class II
Image Frame Rate	60fps
Code Support	1D: 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 等。  2D: PDF417, MicroPDF417,Data Matrix, Maxicode, QR Code, MicroQR, Aztec 等。

<b>Light Source System</b>	White light, laser aiming
<b>Minimum Printing Contrast</b>	20%
<b>Function 2</b>	<b>Camera</b>
<b>Front Camera</b>	
<b>Photo Function</b>	Fixed Focus
<b>Pixel</b>	5MP
<b>Rear Camera</b>	
<b>Photo Function</b>	Auto-Focus
<b>Pixel</b>	13MP
<b>Flashlight</b>	Support
<b>Function 3</b>	<b>RFID Read/Write(HF)</b>
<b>Standards Support</b>	Support ISO15693, ISO14443A/B (Without Encryption Protocol), ISO14443A Tag with Encryption Protocol (Mifare One S50, S70 And Its Compatible Cards); Support NFC Protocol
<b>Operating Frequency</b>	HF Frequency Band 13.56MHz
<b>Reading Range</b>	Reading Distance more than 2.5cm for (ISO15693), more than 1.5cm for ISO14443A, and more than 0.5cm for ISO14443B (It varies by different tags).
<b>Function 4</b>	<b>Security Module</b>
<b>Type</b>	Micro PSAM*1
<b>Function 5</b>	<b>GPS</b>
<b>Positioning system</b>	GPS, Beidou, GLONASS (3 in 1)
<b>Frequency</b>	GPS: L1(1.575GHz), Beidou: B1(1.561GHz), GLONASS:L1(1.602GHZ)
<b>Accuracy</b>	5-10meter(OPEN SKY)

### 3. UTOUCH WIRELESS DATA COMMUNICATIONS

<b>Function 1</b>	<b>WLAN WIFI</b>
<b>Protocol</b>	IEEE 802.11a/b/g/n/ac (2.4G/5G dual-frequency WIFI)

<b>Frequency Range</b>	Depends on different countries (regions), 2.4GHz: 2.412GHz-2.472 GHz, 5GHz: 5.170GHz-5.825GHz
<b>Function 2</b>	<b>WWAN Full Network (7 7 modes 18 frequency)</b>
<b>Frequency Band</b>	GSM: Qual Band(850/900/1800/1900Mhz) TD-SCDMA: Band34,Band39 WCDMA: Band1, Band2, Band5, Band8 CDMA 1x /EVDO : BC0 TDD-LTE: Band38, Band39, Band40, Band41 FDD-LTE: Band1, Band3, Band5, Band7, Band8
<b>Function 3</b>	<b>WPAN Bluetooth</b>
<b>Standard</b>	Bluetooth 4.2(Support BLE)
<b>Power</b>	Class II

#### 4. UTOUCH RFID FUNCTION PARAMETERS

Function	RFID Read/Write(UHF)
<b>Read-Write Tag</b>	Support ISO-18000-6C/EPCC1G2
<b>Antenna Parameter</b>	4dBi circular polarization, default as 920-925MHz
<b>Frequency</b>	840-960MHz (may be slightly different depending on the country or region), default as 902-928MHz.
<b>Operation Mode</b>	Work with frequency hopping spread spectrum (FHSS) or fixed frequency
<b>Output Power</b>	5~33dBm
<b>Reading Distance</b>	≥8m @impinj H47 (depending on the tag and environment)
<b>Writing Distance</b>	0-300cm (depending on the tag and environment)
<b>Multi-Tab Reading</b>	500 tags decoding within 20S with impinj H47 (actual speed subjects to the influence of surroundings)
<b>Reading Rate</b>	12ms/word (in average with every word as 32bits)
<b>Writing Rate</b>	60ms/word (in average with every word as 32bits)
<b>Power Consumption</b>	Less than 8W (average)

#### 5. UTOUCH THE THIRD-PARTY APPLICATION SUPPORT

<b>System Software</b>	Android 9.0
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<b>System Programming Environment</b>	Eclipse, Android Studio
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## 6. UTOUCH PERRIPHERALS AND ACCESSORIES

<b>Standard Accessories</b>	Fast Charge Adapter ×1, Type-C Cable ×1
<b>Optional Accessories</b>	Penta Charing Dock, Screen Protector