

UHF RFID Handheld Reader

AZH-P1



1. Product Overview

This is an Android rugged mobile computer. It features powerful processor, 8000mAh battery and superb UHF RFID capability. It can be equipped with Impinj E710 / R2000 linearly or circularly polarized antenna. That it can read tags in bulk from long distance enables it to be deployed in asset management, retail, warehousing, fleet management and etc.

2. Product Parameters

2.1 Physical Characteristics

SKU	AZH-P1
Dimensions	164.2×80.0×24.3 mm/6.46×3.15×0.96in.
Weight	654 g/23.07 oz.
Display	5.2" IPS LTPS 1920×1080
Touch Panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Power	Li-ion, rechargeable, 8000 mAh
	Standby: over 500 hours
	Continuous use: over 12 hours(depending on user environment)
	Charging time: 3-4 hours(with standard adaptor and USB cable)
Expansion Slot	1 slot for Nano SIM card, 1 slot for Nano SIM or TF card
Interfaces	USB 2.0 Type-C, OTG, TypeC headphones supported
Sensors	Light sensor, proximity sensor, gravity sensor
Notification	Sound, LED indicator
Audio	1 microphone; 1 speaker; receiver
Keypad	4 front keys, 1 power key, 2 scan keys, 1 multifunctional key

Key Features

Operating Frequency UHF 860-960 MHz
Engine Based on Impinj E710
International Standard EPC Class1 Gen2, ISO/IEC 18000-6C
CPU Cortex-A53 2.3 GHz Octa-core
RAM+ROM 4 GB+64 GB
Fastest Read Rate 1300+ tags/sec(circular polarization)
Max Read Range 30 m

2.2 Performance

Operating System	Android 11; GMS, FOTA, SafeUEM supported. Committed support for a future upgrade to Android 12, 13, and Android 14 pending feasibility
CPU	Cortex-A53 2.3 GHz Octa-core
RAM+ROM	4 GB+64 GB(optional)
Expansion	Supports up to 128 GB Micro SD card

2.3 Developing Environment

SDK	Software Development Kit
Language	Java
Tool	Eclipse/Android Studio

2.4 Communication

WLAN	IEEE802.11 a/b/g/n/ac, 2.4G/5G dual-band, internal antenna
Bluetooth	Bluetooth 5.0
GNSS	GPS/AGPS, GLONASS, BeiDou; internal antenna
WWAN	2G: GSM850/GSM900/DCS1800/PCS1900
	3G: WCDMA: B1/B2/B4/B5/B8 CDMA2000 EVDO: BC0 TD-SCDMA: A/F
	4G: B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B28A/B28B/B34/B38/B39/B40/B41

2.5 User Environment

Operating Temp.	-4°F~+122°F/-20°C~+50°C
Storage Temp.	-40°F~+158°F/-40°C~+70°C
Humidity	5% RH~95% RH non condensing
Drop Specification	Multiple 1.5 m/4.9 ft. drops to the concrete across the operating temperature range
Tumble Specification	1000×0.5 m/1.64 ft. falls at room temperature
Sealing	IP65 per IEC sealing specifications
ESD	±15 KV air discharge, ±6 KV conductive discharge

2.6 UHF

Engine	Based on Impinj E710
Frequency	865-868 MHz/920-925 MHz/902-928 MHz
Protocol	EPC Class1 Gen2, ISO/IEC 18000-6C
Antenna	Circular polarization(4 dBi), linear polarization(1.8 dBi)
Power	1 (30 dBm, +5 dBm to +30 dBm adjustable)
	2 W Optional (33 dBm, for Latin America, etc.)
Max Read Range (Impinj E710 Chip)	26 m(Impinj MR6 tag, size 70×15 mm) 28 m(Impinj M750 tag, size 70×15 mm) 30 m(Alien H3 Anti-Metal tag, size 130×42 mm)
Fastest Read Rate	1300+ tags/sec(circular polarization)

* Ranges are measured in the open outdoors and low interference environment, and rate is measured in a laboratory low interference environment, they are affected by tags and environment.

2.7 Camera

Camera	13 MP Autofocus with flash
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2.8 Barcode Scanning (Optional)

1D Linear Scanne	Zebra: SE965; Honeywell: N4313
1D Symbologies	UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc.
2D Imager Scanner	Zebra: SE4710 / SE4750 / SE4750MR; Honeywell: N6603; CM60
2D Symbologies	PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode; Postal Codes: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal, Dutch Postal (KIX), etc.

2.9 NFC (Optional)

Frequency	13.56 MHz
Protocol	ISO/IEC 14443-A/B, ISO/IEC 15693, NFC-IP1, NFC-IP2, etc.
Chips	M1 card (S50, S70), CPU card, NFC tags, etc.
Range	2-4 cm

2.10 RFID (Optional)

2.11 Accessories

Standard	AC Adaptor, USB Cable, etc.
Optional	Cradle, Holster , etc.

* For detailed specification, please check Accessory Guide.