

UHF | RAIN - Handheld Reader iData - P1

- RAIN RFID EPC Class 1 Gen2 / ISO 18000-6C compliant)
- Integrated NFC reader (ISO 14443 Type A & B / 15693)
- USB Type-C, USB 2.0, Micro HDMI, OTG
- Integrated 1D/2D barcode scanning
- Detachable 10,000 mAh battery



UHF | RAIN - RFID & Barcode Multifunctional RFID Industrial Tablet

The P1 UHF Series from iData is a new generation of multifunctional industrial tablets designed to improve productivity across manufacturing, logistics, warehousing and retail environments. Combining a large high-resolution display with integrated UHF RFID, NFC and barcode scanning, the P1 enables efficient data capture using a single device.

Supporting EPC Class 1 Gen2 / ISO 18000-6C for UHF RFID and ISO 14443 / ISO 15693 for NFC, the P1 UHF Series delivers accurate and reliable identification for inventory, asset and production management. Its modular accessories, rich interface options and detachable high-capacity battery allow the device to be used both as a fixed workstation terminal and as a handheld mobile solution.

With rugged IP65 protection, enterprise-grade performance and flexible deployment options, the P1 UHF Series is designed for long-term operation in demanding industrial environments.

Common Applications

- Store and retail management
- Warehouse and inventory management
- Fixed asset management
- Production and manufacturing operations
- Equipment inspection and maintenance

Octa-core 2.0GHz high-performance CPU	android 11.0	iData OS 3.0	64GB (ROM) +4GB (RAM) DDR4 high-speed memory
New self-developed scanning engine	2.4G+5G dual-band Wi-Fi	10.1-inch HD big screen	
2W high-power speaker	11000mAh large removable battery	1.2m anti-drop	IP65 Ingress protection

TECHNICAL SPECIFICATIONS

Physical Characteristics

Processor	Octa-core 2.0GHz high-performance processor
Operating System	Android 13 (GMS)
Memory (ROM+RAM)	64GB + 4GB (standard)
SIM	Two out of three SIM card slots, support dual SIM and dual standby *Two out of three SIM card slots: two cards can be held at the same time, Nano SIM card + Nano SIM card / Nano SIM card +TF card
Expansion Slot	Micro SD card (up to 512 GB)
Display Screen	10.1-inch, resolution: 1920*1200 pixels
Touch Screen	Industrial capacitive screen, support wet-hand operation/glove mode/multi-touch/ gesture operation
Camera	13 megapixels rear camera, support auto-focus/ PDAF; 8 megapixels front camera
Flashlight	800mA flashlight
Keypad	4 keypads in total: scan key *1, power key *1, volume key*2
Battery	3.85V lithium battery, with 10000mAh, detachable, back-up battery support
Audio	Built-in dual microphone
Charging Method	Type-C charging and pin-port charging, support 18W fast charging
Reminder	Vibration reminder/LED reminder/high power speaker/Audio reminder
Vibrating Motor	Built-in vibrating motor
Sensors	G-sensor/Proximity sensor/Light sensor/ Geomagnetic sensor/Gyroscope
Intercom Function (Optional)	Support one-button PTT calls

Structure Parameter

Dimension (L*W*D)	244.8mm *163.6mm *14.9mm
Weight	904g (including the battery)

Communication Interface

USB Interface	Type-C 3.0 (with headset function) *1, Type-A USB 2.0*1, Micro HDMI interface *1
OTG Interface	Support

UHF RFID

Communication Protocol	ISO18000-6C/EPC Class1 Gen2
Frequency	902MHz~928MHz/865MHz~868MHz
Output power	Max. 30dBm
Antenna	Circular polarized antenna
Reading distance	1~5 m
Reading rate	>200tags/s

NFC (Standard)

Working Frequency	13.56 MHz
Reading Distance	Within 60 mm
Communication Protocol	ISO14443A/14443B/15693

Scanning Engine

Barcode Type	It can scan one-dimensional / two-dimensional barcodes
Scanning Accuracy	≥3.33mil
Scanning Angle	Pitch: ±60°; Skew : ±45°; Tilt: 360°
View Angle	Horizontal: 44.3°, Vertical 28.4°, Diagonal: 51°
Motion Error Tolerance	8m/s

Environmental Parameter

Working Temperature	-10°C - 50°C *Do not charge under low temperature conditions for the safety concerns
Storage Temperature	-30°C - 70°C (without battery)
Humidity	10%- 95% (no moisture condensation)
Drop Specification	Multiple drops to concrete floor from the height of 1.2m
Roller Drop Specification	300 times of roller drops from a height of 0.5 meter
Ingress Protection	IP65
ESD Protection	±15KV (air discharge), ±8KV (contact discharge)

TECHNICAL SPECIFICATIONS

Communication Transmission

WWAN (Network Frequency)	2G: B2/B3/B5/B8 3G: WCDMA: B1/B2/B5/B8 4G: B1/B2/B3/B4/B5/B7/B8/B12/B17/B19/B20/ B28A/B28B/B34/B38/B39/B40/B41
WWAN (Data Service)	GSM/GPRS/EDGE/UMTS/HSPA/HSPA+/WCDMA/ TDD-LTE/FDD-LTE
WLAN Function	Wi-Fi 802.11a/b/g/n/ac (2.4G + 5G dual-band Wi-Fi), support fast roaming
Bluetooth	Bluetooth 5.0
GPS	GPS/AGPS/BDS/Galileo/GLONASS/QZSS

Development Support

Programming Language	Java
Development API	iScan API (Scanning Development Kits), Device API (Device Management/Configuration Development Kits), Android Standard Interface
Development Tool	Eclipse/Android Studio

Accessories (More details in accessories guide)

Standard Accessories	USB cable*1, device-back strap *1, power adapter*1, battery*1
Optional Accessories	Charging dock, extension dock, protective film, multifunctional cradle (square U-bolt clamp), multifunctional cradle (round U-bolt clamp)