



Features



Overview

Pegasus AT8800 with abundant functions is an Android 7.1 rugged tablet. With its powerful Qualcomm CPU, 8 inch high-definition screen, 8000 mAh Battery and comprehensive data capture options like UHF RFID, Barcode Scanning, HF RFID/NFC, Iris and Fingerprint Recognition, etc.. you can find this easy-to-deploy device a valuable helper to increase productivity in Retail, Logistics, Warehousing, identity verification, Meter Reading, etc..



Physical Characteristics

| | |
|-----------------------|---|
| Dimensions | 250.8mm x 152mm x 15mm/ 9.87 x 5.98 x 0.59in(for standard version) |
| Weight | 700g/24.7oz(for standard version) |
| Display | 8" IPS LTPS 1920x1200 |
| Touch Panel | Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported |
| Power | Main battery: Li-ion, rechargeable 8000mAh Standby: over 500 hours Continuous use: over 10 hours (depending on user environment) Charging time: 5-7 hours (with standard AC adaptor and USB cable) |
| Expansion Slot | 1 slot for SIM card, 1 slot for TF card, Optional PSAM card slot |
| Interfaces | USB 3.0 Type-C, OTG |
| Audio | Speaker, microphone |
| Keypad | 1 front key, 1 volume key, 1 power key |
| Sensors | Gravity sensor |

Performance

| | |
|------------------|------------------------------------|
| CPU | Qualcomm 1.8GHz Octa-core |
| RAM+ROM | 2GB+16GB |
| Expansion | Supports up to 128GB Micro SD card |

Developing Environment

| | |
|-------------------------|----------------------------------|
| Operating System | Android 7.1 |
| SDK | Pegasus Software Development Kit |
| Language | Java |
| Tool | Eclipse / Android Studio |

User Environment

| | |
|-----------------------------|--|
| Operating Temp. | -4°F to 122°F / -20°C to 50°C |
| Storage Temp. | -40°F to 158°F / -40°C to 70°C |
| Humidity | 5%RH - 95%RH non condensing |
| Drop Specification | Multiple 1.5m/4.9ft drops to concrete across the operating temperature range |
| Tumble Specification | 500 x 0.5m/1.64ft falls at room temperature |
| Sealing | IP65 per IEC sealing specifications |
| ESD | ±15KV air discharge, ±8KV conductive discharge |

Communication

| | |
|------------------|--|
| WLAN | IEEE802.11 a/b/g/n/ac, 2.4G/5G dual-band, internal antenna |
| | 2G: 850/900/1800/1900MHz, GPRS, EDGE |
| | 3G: CDMA EVDO:BC0 |
| WWAN | TD-SCDMA: B34/B39 |
| | WCDMA: B1/B2/B5/B8 |
| | 4G: TDD-LTE: B38/B39/B40/B41 |
| | FDD-LTE: B1/B2/B3/B4/B5/B7/B8/B20/B26/B28 |
| Bluetooth | Bluetooth 4.2/4.1+HS/4.0/3.0+HS/2.1+EDR |
| GNSS | GPS/AGPS, GLONASS, BeiDou, internal antenna |

Data Collection

Camera

| | |
|---------------------|---------------------------|
| Rear Camera | 13MP Autofocus with flash |
| Front Camera | 8MP |

Barcode Scanning (Optional)

| | |
|-------------------------|--|
| Scan Engine | Zebra SE4710 (standard), Zebra SE4850 (optional) |
| 1D Symbolologies | UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc. |
| 2D Symbolologies | 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. |

RFID (Optional)

UHF

| | |
|------------------|---|
| Frequency | 865MHz-868MHz / 920-925MHz / 902-928MHz |
|------------------|---|

* For detailed specification, please check AT8800 UHF part.

NFC/HF

| | |
|------------------|---|
| Frequency | 13.56MHz |
| Protocol | ISO14443A/B, ISO15693, NFC-IP1, NFC-IP2, etc. |
| Chips | M1 card (S50, S70), CPU card, NFC tags, etc. |
| Range | 2-4cm |

Fingerprint (Optional)

Option 1

| | |
|---------------|----------------------|
| Sensor | TCS1/TCS2 Capacitive |
|---------------|----------------------|

Option 2

| | |
|---------------|-----------------------|
| Sensor | Optical Morpho CBM-E3 |
|---------------|-----------------------|

* For detailed specification, please check AT8800 Fingerprint part.

InfraRed (Reserved)

| | |
|-------------------|----------------------------|
| Wavelength | 940nm |
| Frequency | 38kHz |
| Range | > 4m |
| Protocol | DLT_645-2007, DLT_645-1997 |

Front Iris (Reserved)

| | |
|-----------------|---------------------------------|
| Rate | <150ms |
| Range | 20-40cm |
| FAR | 1/10000000 |
| Protocol | ISO/IEC 19794-β GB/T 20979-2007 |

PSAM (Optional)

| | |
|------------------|------------------|
| Card slot | 2 PSAM card slot |
| Protocol | ISO7816 |

Accessories (See details in Accessory Guide)



UHF

Deliver Better-than-ever UHF Performance



Specification

UHF(Optional)

| | |
|--------------|--|
| Engine | CM2000-1 module based on Impinj Indy R2000 |
| Frequency | 865MHz-868MHz / 920-925MHz / 902-928MHz |
| Protocol | EPC C1 GEN2 / ISO18000-6C |
| Antenna | Circular polarization (default UHF, 3dBi ; UHF with pistol grip, 4dBi) |
| Power | 1W (30dBm, +5dBm to +30dBm adjustable) |
| R/W range | > 10m (open outdoors); > 25m (indoors) |
| Reading rate | > 200 tags/s |

* Ranges and rates depend on tags and environment.

Biometrics

Accurate Fingerprint Reading and Facial Recognition

FINGERPRINT TCS1 Capacitive



FINGERPRINT TCS2 Capacitive



FINGERPRINT Optical Fingerprint



Specification

Fingerprint (Optional)

Option 1

| | |
|-----------------------|---|
| Sensor | TCS1/TCS2 Capacitive |
| Sensing Area (mm) | 12.8x18; 10.4x14.4 |
| Resolution (dpi) | 508 dpi, 8-bit greylevel |
| Certifications | FIPS 201, STQC |
| Format Extraction | ISO 19794, WSQ, ANSI 378, JPEG2000 |
| Fake Finger Detection | Support by SDK |
| Security | AES, DES key encryption of the host communication channel |

Option 2

| | |
|-----------------------|--|
| Sensor | Optical Morpho CBM-E3 |
| Sensing Area (mm) | 14x22 |
| Resolution (dpi) | 500 dpi, 256 greylevel |
| Certifications | FIPS PIV IQS / ISO 19794-4, MINEX & FIPS 201 complaint, STQC |
| Format Extraction | ISO 19794-2/4, WSQ, ANSI 378, etc. |
| Fake Finger Detection | Latex, Gelatin, Plasticine, Kapton, Transparent Film, Silicone, Rubber, Play-doh, Graphite Or Paper |
| Security | FIPS 140-2 level 2, multiple security methods available including image and templates encryption, template signature, secure tunneling, etc. |