

CHAINWAY®



C66

Mobile Computer



Chainway C66 is a highly expandable large-screen rugged handheld computer. Equipped with Qualcomm octa-core processor and Android 11 / 13, C66 comes with a 5.5-inch HD display, barcode scanning, and NFC functions. The device supports quick charge and UHF sled for high extensibility. The premium Android 11 / 13 version offer optional fingerprint recognition, volume measurement, built-in UHF functions and with Wi-Fi 6-ready platform for higher data throughput and security that fully satisfy the needs in logistics, warehouse, manufacturing, retail, etc. applications.



UHF



UHF Sled Reader



Pistol Grip

Specification

Physical Characteristics

| | |
|---------------------|--|
| Dimensions | 160.0 x 76.0 x 15.5 / 17.0mm / 6.3 x 2.99 x 0.61 / 0.67in. |
| Weight | 287g / 10.12oz.(device with battery) 297g / 10.47oz.(device with battery, Fingerprint / Volume Measurement / Built-in UHF) |
| Keypad | 1 power key, 2 scan keys, 2 volume keys |
| Battery | Removable main battery (normal version:4420 mAh ; Android 11 with fingerprint / built-in UHF / volume measurement version: 5200mAh) 5200mAh optional pistol battery, support QC3.0 and RTC Standby: up to 490 hours (only main battery ; WiFi: up to 470h; 4G: up to 440h) Continuous use: over 12 hours (depending on user environment) Charging time: 2.5 hours (charge device by standard adaptor and USB cable) |
| Display | 5.5-inch high definition full display (18:9), IPS 1440 x 720 |
| Touch Panel | Multi-touch panel, gloves and wet hands supported |
| Sensor | Accelerometer sensor, light sensor, proximity sensor, gravity sensor gyroscope sensor (optional), geomagnetic sensor (optional) |
| Notification | Sound, LED indicator, vibrator |
| Audio | 2 microphones, 1 for noise cancellation; 1 speaker; receiver |
| Card slot | 1 slot for Nano SIM card, 1 slot for Nano SIM or TF card |
| Interfaces | USB Type-C, USB 3.1, OTG, extended thimble; |
| Performance | |
| CPU | Qualcomm Snapdragon™ 662 Octa-core, 2.0 GHz |
| RAM+ROM | 3GB + 32GB / 4GB + 64GB |
| Expansion | Supports up to 128GB Micro SD card |

Developing Environment

| | |
|-------------------------|---|
| Operating System | Android 11 / 13; GMS, 90-day security updates, Android Enterprise Recommended, Zero-Touch, FOTA, Soti MobiControl, SafeUEM supported. |
| SDK | Chainway 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 1.8m / 5.9ft. drops (at least 20 times) to the concrete across the operating temperature range Multiple 2.4m / 7.87ft. drops (at least 20 times) to the concrete after installed rubber boots MIL-STD-810H(SGS Test): Multiple 1.22 M drops (at least 20 times) to the plate across the operating temperature range |
| Tumble Specification | 1000 x 0.5m / 1.64ft. falls at room temperature |
| Sealing | IP65 per IEC sealing specifications, IP67 optional |
| ESD | ± 15KV air discharge, ± 8KV conductive discharge |

Communication

| | |
|------------------|--|
| Vo-LTE | Support Vo-LTE HD video voice call |
| Bluetooth | Bluetooth 5.1 |
| GNSS | GPS/AGPS, GLONASS, BeiDou, Galileo, internal antenna |
| WLAN | Support 802.11 a/b/g/n/ac/ax-ready/d/e/h/i/k/r/v, 2.4G/5G dual-band, IPV4, IPV6, 5G PA; Fast roaming: PMKID caching, 802.11r, OKC Operating Channels: 2.4G(channel 1~13), 5G(channel 36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132, 136,140,144,149,153,157,161,165), Depends on local regulations Security and Encryption: WEP, WPA/WPA2-PSK(TKIP and AES), WAPI-PSK—EAP-TLS, EAP-TLS, PEAP-MSCHAPv2, PEAP-LTS,PEAP-GTC,etc. |

| | |
|----------------------------|--|
| WWAN (Europe, Asia) | 2G: 850/900/1800/1900 MHz 3G: CDMA EVDO: BC0 WCDMA: 850/900/1900/2100MHz TD-SCDMA: A/F(B34/B39) 4G: B1/B3/B5/B7/B8/B20/B38/B39/B40/B41 |
| WWAN(America) | 2G: 850/900/1800/1900MHz 3G: 850/900/1900/2100MHz 4G: B2/B4/B5/B7/B8/B12/B13/B17/B28A/B28B/B38 |

Data Collection

Camera

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

NFC

| | |
|------------------|---|
| 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 |

Barcode Scanning (Optional)

| | |
|-----------------------|--|
| 2D Scanner | Zebra: SE4710/SE2100; Honeywell: N6603; E3200; IA166S; CM60 |
| 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 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. |

UHF

*For detailed specification, please check C66 UHF part

Fingerprint

Optional 1

| | |
|------------------------------|---|
| Sensor | TCS1 |
| Sensing Area (mm) | 12.8 x 18.0 |
| 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 |

Optional 2

| | |
|------------------------------|---|
| Sensor | TLK1NC02 |
| Sensing Area (mm) | 14.0 X 22.0 |
| Resolution (dpi) | 508dpi, 256 greylevel |
| Certifications | FIPS 201, FBI |
| Format Extraction | ISO19794, WSQ, ANSI 378, JPEG2000 |
| Fake Finger Detection | Support by SDK |
| Security | AES, DES key encryption of the host communication channel |

Volume Measurement (Optional, only Android 11)

| | |
|----------------------------|----------------|
| Sensor | IRS1645C |
| Measurement Error | < 5% |
| Module | MD101D |
| Field of view Angle | D71°/H60°/V45° |
| Measurement speed | 2s / piece |
| Measured distance | 40cm-4m |

* Volume Measurement version does not support pistol

Optional accessories(See details in Accessory Guide)

Separate handle with one button; Handle + battery (handle battery 5200mAh, one button) ;

UHF back clip + handle (5200mAh, one button) ; Wrist Strap; Rubber Bumper; Charging Cradle

Notice: Product specifications are subject to change without prior notice. / Model: C66 / Update Date: 2024-02-21

CHAINWAY®

Shenzhen Chainway Information Technology Co., Ltd

Address: 9F, Building2, Phase 2, Gaoxinqi Industrial Park, Liuxian 1st Rd., Bao'an District, Shenzhen, Guangdong 518102, China
Tel: 0086-755-23223316 Fax: 0086-755-23223310 Email: sales@chainway.cn Web: http://www.chainway.net

Specification

UHF1

UHF Back Clip



UHF2

C66 + R6 UHF Sled



UHF3

C66 UHF (Built-in)



UHF1 (Optional, C66 UHF Back Clip)

| | |
|---------------------------|---|
| Engine | CM710-1 module based on Impinj E710 CM2000-1 module based on Impinj Indy R2000 |
| Frequency | 865-868MHz / 920-925MHz / 902-928MHz |
| Protocol | EPC C1 GEN2 / ISO18000-6C |
| Antenna | Circular Polarized Antenna (4dBi) |
| Power | 1W (30dBm, +5dBm to +30dBm adjustable) 2W Optional (33dBm, for Latin America, etc.) |
| Max Read Range | Impinj E710 chip: 28m (Impinj MR6 tag, size 70 x 15mm) 28m (Impinj M750 tag, size 70 x 15mm) 32m (Alien H3 Anti-Metal tag, size 130 x 42mm) Impinj R2000 chip: 22m (Impinj MR6 tag, size 70 x 15mm) 24m (Impinj M750 tag, size 70 x 15mm) 30m (Alien H3 Anti-Metal tag, size 130 x 42mm) |
| Fastest Read Rate | 1300+ tags/sec |
| Communication Mode | Pin Connector |

UHF2 (Optional, C66 + R6 UHF Sled)

| | |
|---------------------------|---|
| Engine | CM710-1 module based on Impinj E710 CM2000-1 module based on Impinj Indy R2000 |
| Frequency | 865-868MHz / 920-925MHz / 902-928MHz |
| Protocol | EPC C1 GEN2 / ISO18000-6C |
| Antenna | Circular Polarized Antenna (3dBi) |
| Power | 1W (30dBm, support +5*+30dBm adjustable) 2W Optional (33dBm, for Latin America, etc.) |
| Max Read Range | Impinj E710 chip: 30m (Impinj MR6 tag, size 70 x 15mm) 28m (Impinj M750 tag, size 70 x 15mm) 31m (Alien H3 Anti-Metal tag, size 130 x 42mm) Impinj R2000 chip: 25m (Impinj MR6 tag, size 70 x 15mm) 26m (Impinj M750 tag, size 70 x 15mm) 25m (Alien H3 Anti-Metal tag, size 130 x 42mm) |
| Fastest Read Rate | 1300+ tags/sec |
| Communication Mode | Pin Connector / Bluetooth |

UHF3 (Optional, C66 UHF Built-in)

| | |
|-----------------------|--|
| Engine | CM-5N module based on Impinj E510 |
| Frequency | 865-868 MHz / 920-925 MHz / 902-928 MHz |
| Protocol | EPC C1 GEN2 / ISO18000-6C |
| Antenna | Circular polarization (-5 dBi) |
| Power | 1 W (+5dBm to +30dBm adjustable) |
| Max Read Range | 2.4m (Impinj MR6 tag, size 70 x 15mm) 2.6m (Impinj M750 tag, size 70 x 15mm) 2.7m (Alien H3 Anti-Metal tag, size 130 x 42mm) |

* 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.

* built-in UHF version does not support pistol