

# CHAINWAY®



# C66

## Mobile Computer



Chainway C66 is a highly expandable large-screen rugged handheld computer. Equipped with 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 Built-In

# Specification

## Physical Characteristics

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

|                    |   |
|--------------------|---|
| <b>Performance</b> |   |
| <b>CPU</b>         | Octa-core, 2.0 GHz                      |
| <b>RAM+ROM</b>     | 3GB + 32GB / 4GB + 64GB                 |
| <b>Expansion</b>   | Supports up to 256GB Micro SD (TF) card |

## Developing Environment

|                         |  |
|-------------------------|--|
| <b>Operating System</b> | Android 11/13; GMS, 90-day security updates, Android Enterprise Recommended, Zero-Touch, FOTA, Soti MobiControl, SafeUEM supported. Committed support for a future upgrade to Android 18 pending feasibility |
| <b>SDK</b>              | Chainway Software Development Kit  |
| <b>Language</b>         | Java   |
| <b>Tool</b>             | Eclipse / Android Studio   |

## User Environment

|                             |   |
|-----------------------------|---|
| <b>Operating Temp.</b>      | -4°F to 122°F / -20 °C to +50 °C  |
| <b>Storage Temp.</b>        | -40°F to 158°F / -40 °C to +70 °C   |
| <b>Humidity</b>             | 5% RH - 95% RH non condensing   |
| <b>Drop Specification</b>   | Multiple 1.8m / 5.91ft. drops (at least 20 times) to the concrete across the operating temperature range<br>Multiple 2.4m / 7.87ft. drops (at least 20 times) to the concrete after installed rubber boots<br>MIL-STD-810H(SGS Test): Multiple 1.22 M drops (at least 20 times) to the plate across the operating temperature range |
| <b>Tumble Specification</b> | 1000 x 0.5m / 1.64ft. falls at room temperature   |
| <b>Sealing</b>              | IP65 per IEC sealing specifications, IP67 optional  |
| <b>ESD</b>                  | ± 15KV air discharge, ± 8KV conductive discharge  |

## Communication

|                  |  |
|------------------|--|
| <b>Vo-LTE</b>    | Support Vo-LTE HD video voice call   |
| <b>Bluetooth</b> | Bluetooth 5.1  |
| <b>GNSS</b>      | GPS/AGPS, GLONASS, BeiDou, Galileo, internal antenna   |
| <b>WLAN</b>      | 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;<br>Fast roaming: PMKID caching, 802.11r, OKC<br>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<br>Security and Encryption: WEP, WPA/WPA2-PSK(TKIP and AES), WAPI-PSK—EAP-TTLS, EAP-TLS, PEAP-MSCHAPv2, PEAP-LTS,PEAP-GTC, WPA3-Enterprise,etc. |

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

## Data Collection

|                    |  |
|--------------------|--|
| <b>Camera</b>      |  |
| <b>Rear Camera</b> | Rear 13MP Autofocus with flash<br>Facial Recognition ISO19794-5 Compatible |

## NFC

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

## Barcode Scanning (Optional)

|                       |  |
|-----------------------|--|
| <b>2D Scanner</b>     | Zebra: SE4710/SE2100; Honeywell: N6603/6803FR; E3200; IA166S; CM60;  |
| <b>1D Symbologies</b> | UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc.   |
| <b>2D Symbologies</b> | 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

|                              |   |
|------------------------------|---|
| <b>Sensor</b>                | TCS1  |
| <b>Sensing Area (mm)</b>     | 12.8 x 18.0   |
| <b>Resolution (dpi)</b>      | 508 dpi, 8-bit greylevel                                  |
| <b>Certifications</b>        | FIPS 201, STQC  |
| <b>Format Extraction</b>     | ISO 19794, WSQ, ANSI 378, JPEG2000                        |
| <b>Fake Finger Detection</b> | Support by SDK  |
| <b>Security</b>              | AES, DES key encryption of the host communication channel |

## Optional 2

|                              |   |
|------------------------------|---|
| <b>Sensor</b>                | TLKINC02  |
| <b>Sensing Area (mm)</b>     | 14.0 X 22.0   |
| <b>Resolution (dpi)</b>      | 508dpi, 256 greylevel                                     |
| <b>Certifications</b>        | FIPS 201, FBI   |
| <b>Format Extraction</b>     | ISO19794, WSQ, ANSI 378, JPEG2000                         |
| <b>Fake Finger Detection</b> | Support by SDK  |
| <b>Security</b>              | AES, DES key encryption of the host communication channel |

## Volume Measurement (Optional, only Android 11)

|                            |                |
|----------------------------|----------------|
| <b>Sensor</b>              | IRS1645C       |
| <b>Measurement Error</b>   | < 5%           |
| <b>Module</b>              | MD101D         |
| <b>Field of view Angle</b> | D71°/H60°/V45° |
| <b>Measurement speed</b>   | 2s / piece     |
| <b>Measured distance</b>   | 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: 2024-09-20

**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

## UHF3

C66 UHF (Built-in)



### UHF3 (Optional, C66 UHF Built-in)

|                       |  |
|-----------------------|--|
| <b>Engine</b>         | CM-5N module based on Impinj E510  |
| <b>Frequency</b>      | 865-868 MHz / 920-925 MHz / 902-928 MHz  |
| <b>Protocol</b>       | EPC C1 GEN2 / ISO18000-6C  |
| <b>Antenna</b>        | Linear Polarized Antenna (-5 dBi)  |
| <b>Power</b>          | 1 W (+5dBm to +30dBm adjustable)   |
| <b>Max Read Range</b> | 2.4m (Impinj MR6 tag, size 70 x 15mm)<br>2.6m (Impinj M750 tag, size 70 x 15mm)<br>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