# C4000
## Mobile Computer

Chainway C4000 is an Android-based rugged mobile computer. With its powerful 1.3GHz processor and best possible battery performance, as well as the comprehensive data capture options, including LF/HF/UHF RFID and NFC reading, high-performance 1D/2D, infra-red and sensitive fingerprint scanning, you can find this easy-to-deploy device an exceptionally valuable helper for your workers to increase their efficiency and productivity. With its highly customizable ability, enterprises can deploy this single device in many areas, including retail, warehouse management, logistics, asset tracking, fleet management, animal management and etc.

ISO 9001 UCC · CE · CCC · RoHS · FC

## Powerful Application Performance
The C4000 is based on Android 4.4.2 system, features the fast and powerful quad core 1.3GHz processor, together with 1GB of RAM, 4GB build-in flash storage, plus a SD card slot that can add up to 32GB of memory.

## Rugged and Compact
The C4000 is highly rugged, compact and durable. With an IP64 water and dust proof capability, workers can drop this device on concrete, use it in dusty areas, even get it wet, and still expect reliable operation.

## Powerful Battery
With the 3200mAh main battery and the optional 5200mAh pistol battery, you can be confident that your C4000 can always deliver results when you need it to.

## Extensive Data Capture Functions
The C4000 can be integrated with best-in-class Zebra 1D/2D scanning engine, LF/HF/UHF RFID or NFC reading module, sensitive fingerprint snap-on and GPS. It allows users to choose data collection options as per industry need.

## Fast Wireless Connectivity
The C4000 provides enterprises with anywhere, anytime real-time connectivity by a variety of wireless connections including WCDMA, WiFi, Bluetooth and GPRS.

## Highly Customizable
From a single function device to a fully featured enterprise mobile computer, this device delivers the best possible flexibility and diversity to satisfy a whole variety of application needs.

## About Chainway

As a leading "Internet of Things" company in China, Shenzhen Chainway Information Technology Co., Ltd is a professional provider of products and solutions of RFID and barcode technology. Founded in 2005, Chainway, a high-tech enterprise, has won several times the title of the Best Provider of RFID Readers. Thousands of clients from over 100 countries have experienced our products in retail, logistics, transportation, healthcare, finance, security and manufacturing, etc. Through our nationwide offices, overseas subsidiary and an extensive partner network, we aim to provide high quality service to our clients.

# CHAINWAY®

| 1D Barcode | 2D Barcode | RFID | NFC | Fingerprint | InfraRed | 3G | WiFi | Bluetooth | GPS | Camera |

## Physical Characteristics

| | |
|---|---|
| Dimensions | 153mm x 75mm x 29mm/ 6.02 x 2.95 x 1.14in |
| Weight | 286g/ 10.09oz |
| Display | 4'' WVGA (480*800), 16.7M colors |
| Touch Panel | Rugged capacitive touch panel |
| Power | Main battery: Li-ion, 3200mAh |
| | Pistol battery: Li-ion, 5200mAh (Optional) |
| Expansion Slot | 1 PSAM, 1 SIM, 1 MicroSD(TF) slot |
| Interfaces | USB Micro-B |
| Audio | 0.5W speaker, build-in microphone |
| Keypad | 4 TP touch key-press buttons |
| Sensors | Light Sensor, Proximity Sensor |

## Performance

| | |
|---|---|
| CPU | Cortex-A7  1.3GHz quad-core |
| RAM+ROM | 1GB+4GB |
| Expansion | Supports up to 32GB Micro SD card |

## Developing Environment

| | |
|---|---|
| Operating System | Android 4.4.2 |
| SDK | Chainway Software Development Kit |
| Language | Java |
| Tool | Eclipse / Android Studio |

## User Environment

| | |
|---|---|
| Operating Temp. | 14$^\circ$F to 122$^\circ$F / -10$^\circ$C to 50$^\circ$C |
| Storage Temp. | -40$^\circ$F to 158$^\circ$F / -40$^\circ$C to 70$^\circ$C |
| Humidity | 5%RH - 95%RH non condensing |
| Drop Specification | Multiple 1.2m drops to concrete across the operating temperature range |
| Tumble Specification | 1000 x 0.5m/1.64ft falls at room temperature |
| Sealing | IP64 |

## Communication

| | |
|---|---|
| WLAN | IEEE802.11 b/g/n |
| WWAN | GSM/GPRS/EDGE Quad Band (850/900/1800/1900MHz) |
| | WCDMA (850/1900/2100MHz) |
| Bluetooth | Bluetooth 4.0 |
| GNSS (Optional) | GPS, AGPS |

## Fingerprint (Optional)

| | |
|---|---|
| Functions | Fingerprint enrollment, match, storage etc. |
| Sensor | TCS1 / TCS2SS (Capacitive) |
| Image Size (pixel) | TCS1: 256×360; TCS2SS: 208×288 |
| Sensing Area (mm) | TCS1: 12.8×18; TCS2SS: 10.4×14.4 |
| Resolution (dpi) | 508 |
| Standard | TCS1: FIPS, STQC; TCS2SS: ISO |

## InfraRed (Optional)

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

## Barcode Scanning (Optional)

### 1D Linear Scanner

| | |
|---|---|
| 1D Laser / CCD | Zebra SE965 |
| 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

| | |
|---|---|
| 2D CMOS Laser Scanner | Zebra SE4750 |
| 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. |

## RFID (Optional)

### LF

| | |
|---|---|
| Frequency | 125kHz, 134kHz (FDX-B / HDX) |
| Protocol | ISO11784/5, ISO18000-2 |
| Chips | R/O ID card, eg EM4100/4200, TK4100 |
| | R/W ID card, eg EM4305/HITAG S |
| | Animal tags |
| | Others for customization |
| Range | 3-8cm |

### LF (with external antenna)

| | |
|---|---|
| Frequency | 134kHz (FDX-B+HDX) |
| Protocol | ISO11784/5 |
| Chips | Animal tags |
| | Others for customization |
| Range | 3-12cm, external antenna |
| | 3-20cm, with a 75cm extension antenna |

### HF

| | |
|---|---|
| Frequency | 13.56MHz |
| Protocol | ISO14443A/B, ISO15693 |
| Chips | M1 card (S50/S70), M0 (Ultralight), M3 (Desfire D40/D41/D81), CPU_A card |
| | CPU_B card |
| | ICODE II, TI2048, LRI64K |
| | Others for customization |
| Range | 3-8cm |

### 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 |

* For the UHF specifications, please check C4000UHF specification sheet

## Other Modules (Optional)

| | |
|---|---|
| Camera | 8MP autofocus camera with flash |
| PSAM | ISO7816 Protocol, 1 PSAM slot |

## Accessories

AC Adapter

Snap-on

USB cable

Cradle

Pistol (Optional)

Fingerprint (Optional)

External antenna (Optional)

Carrying case (Optional)

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Notice: Product specifications are subject to change without notice. / Version: C4000 V2.1.0 / Update Date: 2017-09-01