

# C61

## Cold Android Mobile Computer



C61-Cold, specialising for cold-chain warehousing, is Chainway's industrial-grade and smart handheld terminal with high performance. It could work normally and decode efficiently in low temperature and high relative humidity environment of  $-30^{\circ}\text{C}$  /  $-22^{\circ}\text{F}$  by equipments with 6400 mAh large-capacity battery of low temperature resistance and professional anti-condensation screen. Meanwhile it supports optional UHF, NFC and other functions, and features dual-band Wifi antenna intently optimising for indoor applications and scenarios. All of these characteristics make this model perfect to be deployed in in/out storage, inventory and sorting for cold-chain environment and significantly improve work efficiency.



ANDROID



LTE



WIFI



NFC



GPS



IP65



1D / 2D



RFID UHF



FINGERPRINT



CAMERA



# C61 Specifications



## Physical Characteristics

<b>Dimensions</b>	202.0 x 72.5 x 32.0 mm
<b>Weight</b>	370g (SE4710) - 404g (SE4850)
<b>Display</b>	4-inch industrial-grade TN $\alpha$ -Si 800*480
<b>Touch Panel</b>	Multi-touch panel, gloves and wet hands supported
<b>Power</b>	6400 mAh removable main battery, 5200 mAh optional pistol battery, support QC3.0 and RTC; Built in 100mAh backup battery, supporting battery hot swap, improving reliability and ensuring user data security Continuous use: 5.5 hours (continuous scan at 500ms interval at -30 ° C / -22:F)
<b>Expansion Slot</b>	1 slot for nano SIM
<b>Interfaces</b>	1 slot for nano SIM or TF card USB 3.0 Type-C, OTG (Android 9) USB 3.1 Type-C, OTG (Android 11)
<b>Audio</b>	Speaker, 2 Microphones, 1 for noise reduction
<b>Indicator LED</b>	Power charging, Status indicator
<b>Keypad</b>	Main keyboard (optional) : 27 keys / 37 keys / 47 keys; Side keys: 2 scan keys + 2 volume keys + 1 user-defined key
<b>Sensors</b>	Gravity sensor, Light Sensor, Proximity Sensor, Accelerometer

## Performance

<b>CPU</b>	Android 9 Qualcomm Snapdragon™ 450 Octa-core, 1.8 GHz Android 11 Qualcomm Snapdragon™ 662 Octa-core, 2.0 GHz
<b>RAM+ROM</b>	3GB+32GB / 4GB+64Gb
<b>Expansion</b>	Supports up to 128 GB Micro SD card

## Developing Environment

<b>Operating System</b>	Android 9; GMS, 90-day security updates, Android Enterprise Recommended, Zero-Touch, FOTA, Soti MobiControl, SafeUEM supported Android 11; GMS, 90-day security updates, Android Enterprise Recommended, Zero-Touch, FOTA, Soti MobiControl, SafeUEM supported. Committed support for a future upgrade to Android 12, 13, and Android 14 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>	-30 °C to 50 °C
<b>Storage Temp.</b>	-40 °C to 70 °C
<b>Humidity</b>	5%RH - 95%RH non condensing
<b>Drop Specification</b>	Multiple 1.8m drops to the concrete across the operating temperature range Multiple 2.4m drops to the concrete with options bumpers installed
<b>Tumble Specification</b>	1000 x 0.5m falls at room temperature
<b>Sealing</b>	IP65 per IEC sealing specifications
<b>ESD</b>	15KV air discharge, $\pm$ 8KV conductive discharge

## Communication

<b>Vo-LTE</b>	Support Vo-LTE HD video voice call Support 802.11 a/b/g/n/ac/d/e/h/i/k/r/v, 2.4G/5G dual-band, IPV4, IPV6, 5G PA; Fast roaming: PMKID caching, 802.11r, OKC
<b>WLAN</b>	Operating Channels: 2.4G(channel 1-13), 5G(channel36,40,44,48,52,56,60,64,100,104,108,112,116,120, 124,128,132, Security and Encryption: WEP, WPA/WPA2-PSK(TKIP and AES), WAPIPSK— EAP-TTLS, EAP-TLS, PEAP-MSCHAPv2, PEAP-LTS,PEAP-GTC,etc.
<b>WWAN(EU)</b>	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
<b>Bluetooth</b>	Android 9 Bluetooth 4.2/4.1+HS/4.0/3.0+HS/2.1+EDR Android 11 Bluetooth 5.1
<b>GNSS</b>	GPS/AGPS, GLONASS, BeiDou with internal antenna

## RFID

<b>UHF ( Optional)</b>	
<b>Engine</b>	CM710-1 module based on Impinj E710 CM2000-1 module based on Impinj Indy R2000
<b>Frequency</b>	865MHz-868MHz
<b>Protocol</b>	EPC C1 GEN2 / ISO18000-6C
<b>Antenna</b>	Circular Polarized Antenna (4 dBi)
<b>Power</b>	1W (+5dBm to 30dBm adjustable) 2W (+5dBm to 33dBm adjustable) options
<b>Read/Write Range</b>	Up to 15m with Circular Antenna outdoor

(\* Read/write Range and Reading Rates depend on tags and environments. Tested with Impinj MR6 tag

## NFC

<b>Frequency</b>	13.56MHz
<b>Protocol</b>	ISO14443A/B, ISO15693, NFC
<b>Chip</b>	M1 card (S50, S70), CPU card, etc.

## Barcode Scanning (Optional)

<b>Scan Engine</b>	Zebra: SE4710/SE4750SR/SE4750MR/SE4750DP/SE4850; Honeywell: N6603/EX30
<b>1D Symbolologies</b>	UPC/EAN, Code128, Code39, Code93, Code11, Codabar, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, MSI, RSS, etc.
<b>2D Symbolologies</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.

## Camera

<b>Rear Camera</b>	13MP Autofocus with flash
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