CHAINWAY®

C90

Mobile Computer

Android 10	4G	WiFi	Bluetooth	1D Barcode	2D Barcode	NFC	GMS	Camera	GNSS	AI Engine

Chainway C90 is our newly-developed, lightweight and portable handheld terminal that exhibits extremely powerful performance. Built with Android 10 OS and high-performance octa-core processor, it features vigorous system configuration. With rich functionality features like outstanding barcode scanning, sturdy WiFi performance, NFC, front and rear cameras, it possesses the best price versus performance ratio. All these make C90 immensely perfect to be implemented in a wide spectrum of industries, including logistics, warehousing, retail, asset tracking etc., assisting customers to improve operation and management levels significantly.

Specification

Physical Characteristics

Dimensions	158.5 x 76.0 x 13.1 mm / 6.24 x 2.99 x 0.52 in.
Weight	230g / 8.11 oz. (device with battery)
Keypad	Power, 2 scan keys, volume +/-
Battery	Main battery: built-in 5000 mAh
	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)
Sensor	Light sensor, proximity sensor, gravity sensor
Notification	Sound, LED indicator, vibrator
Audio	2 microphones, 1 for noise cancellation; 1 speaker; receiver
Display	5.7-inch (18:9) , IPS LTPS 1440 x 720
Touch Panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Card slot	1 slot for Nano SIM card, 1 slot for Nano SIM or TF card
Interfaces	USB Type-C, USB 2.0, OTG

Performance

CPU	Cortex-A53 2.0 GHz Octa-core
RAM+ROM	3GB+32GB / 3GB+64GB / 4GB+64GB
Expansion	Supports up to 128 GB Micro SD card

Developing Environment

Operating System	Android 10, GMS, FOTA, Soti MobiControl, Android Enterprise Recommended, Zero-Touch, 90-day security updates, SafeUEM supported; Built-in support for a future upgrade through Android 11 / 12 which complies with GMS and Android Enterprise Recommended
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 1.5 m / 4.92 ft. drops to the concrete across the operating temperature range
Tumble Specification	1000 x 0.5 m / 1.64 ft. falls at room temperature
Sealing	IP67 per IEC sealing specifications
ESD	±15 KV air discharge, ±8 KV conductive discharge

Communication

WLAN	Support IEEE802.11 a/b/g/n/ac/d/e/h/i/k/r/v/w, 2.4G/5G dual-band, IPV4, IPV6; Support 5G PA
	Fast roaming: PMKID caching, 802.11r, OKC
	Operating Channels: 2.4G(channel 1~13), 5G(channel 36,38,40,42,44,46,48,52,56,60,64,100,104,108,112,116,120,124,128,132,136,140,149,153,157,161,165), depends on local regulations
	Security and Encryption: WEP, WPA/WPA2-PSK(TKIP and AES), WAPI-PSK—EAP-TTLS, EAP-TLS, PEAP-MSCHAPv2, PEAP-LTS, PEAP-GTC, etc.
WWAN(Europe/ Asia)	2G: GSM850/GSM900/DCS1800/PCS1900
	3G: CDMA EVDO: BC0
	WCDMA: B1/B2/B4/B5/B8
	TD-SCDMA: A/F(B34/B39)
	4G: B1/B2/B3/B4/B5/B7/B8/B20/B34/B38/B39/B40/B41
WWAN(America)	2G: GSM850/GSM900/DCS1800/PCS1900
	3G: CDMA EVDO: BC0/BC1
	WCDMA: B2/B4/B5/B8
	4G: B2/B4/B5/B7/B8/B12/B17/B28A/B28B/B38
Bluetooth	V2.1+EDR, 3.0+HS and V4.1+HS, BT5.0
GNSS	GPS/AGPS, GLONASS, BeiDou, Galileo, internal antenna

Data Collection

Camera

Front Camera	5MP
Rear Camera	Rear 16MP Autofocus with flash

NFC

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

Barcode Scanning (optional)

2D Scanner	Honeywell: N6603 / N6703; 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.

Optional accessories (See details in Accessory Guide)

Charging Cradle; Lanyard etc.