CHCNAV

HCE620

PORTABLE GNSS DEVICE DATA COLLECTOR



SURVEY & ENGINEERING

CHCNAV

RUGGED FIELD CONTROLLER FOR DATA COLLECTION

The HCE620 is a lightweight, compact data collector powered by Android 11. Specifically designed for surveying and mapping in the field, it features a white backlit full QWERTY keypad and the powerful octa-core Helio MTK 6762 processor. The 5.45-inch display offers a resolution of 1440 x 720 and 500 nits brightness, ensuring exceptional sunlight readability and durability. Connectivity options include Bluetooth 5.0, dual-band 2.4G and 5G Wi-Fi, and a global 4G modem, enabling seamless integration with GNSS receivers and RTK correction sources. With a robust 9000 mAh battery, the HCE620 supports over 20 hours of extended use. Its design withstands drops from heights of up to 1.5 meters and meets IP68 standards for water and dust resistance. Additionally, it includes a 90-day trial of the LandStar Surveying and Mapping App, trusted by over 100,000 professionals worldwide, making the HCE620 the ideal handheld controller for extreme field conditions.

POWERFUL PLATFORM FOR FIELD DATA COLLECTION

Featuring Android 11 operating system

The HCE620 operates on Android 11, features the powerful eight-core Helio MTK 6762 processor, delivering robust performance for CAD drawing management and base map display, significantly enhancing productivity. Dual-band Wi-Fi and built-in 4G cellular modem guarantees reliable connectivity, while the USB 3.0 interface facilitates rapid data transfer for quick uploads of large project files. The HCE620 includes a 90-day trial of CHCNAV's LandStar field survey app. With integrated cloud services, LandStar simplifies data sharing and offers one-click remote support from anywhere.

BRILLIANT HD+ DISPLAY

Enhance your field data collection efficiency

The HCE620 features a 5.45-inch industrial display with 500 nits brightness, ensuring optimal visibility for field data collection even in bright sunlight. This high-definition display presents complex survey projects, CAD base maps, and data with remarkable clarity. The impressive brightness keeps your data readable in all weather conditions, whether in direct sunlight or rain. Access your projects and maps seamlessly in any working environment, allowing you to focus on your tasks efficiently.

DESIGNED FOR MOBILE WORKFORCE

Full keypad design for enhanced user experience.

The HCE620 features a popular slim and lightweight design , weighing only 401 grams, combined with a powerful 9000mAh battery. Its optimized QWERTY keyboard allows for quick data input without changing user habits. Thoughtfully integrated shortcut buttons streamline various operations without increasing the device's size. This high-capacity battery ensures over 20 hours of uninterrupted data collection, making the HCE620 an efficient handheld terminal for measurement and mapping applications.

EXTENDED FIELD PERFORMANCE

Shock, dust and water resistant

The HCE620 features IP68-rated protection, ensuring exceptional durability in harsh environments. It withstands everyday wear and accidental drops from heights up to 1.5 meters, making it ideal for demanding surveying and construction sites. The integrated nine-axis compass and gyro fusion algorithm correct for magnetic interference, providing accurate heading information. This capability enables common surveying applications, such as GNSS RTK stakeout surveys, to be conducted with enhanced efficiency and reliability.

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RUGGED ANDROID FIELD CONTROLLER WITH FULL KEYBOARD



DESIGNED FOR MOBILE WORKFORCE.

SPECIFICATIONS

System	
Operating system	Android 11
CPU	Helio MTK6762 octa-core 2.0 GHz
RAM	4 GB SDRAM
Flash memory	64 GB
Memory card	MicroSDHC up to 128 GB

Physical	
Size (L x W x H)	221 mm × 78 mm × 16.5 mm (8.7 in × 3.0 in × 0.6 in)
Weight	401 g with battery
Environment	Operating: -30°C to +60 °C (-22°F to +140°F) Storage: -40°C to +70°C (-40°F to +158°F)
Dust and water proof	IP68
Humidity	5% ~ 95% (non-condensing)
Shock and vibration	1.5 m (4.9 ft) fall on concrete
Display	5.45" IPS LTPS LCD capacitive multi-touch 1440 × 720 pixels HD + 295 ppi Brightness 500 cd/m²
Keypad	White backlight, full QWERTY with 10-key number pad, directional buttons, and programmable buttons

GNSS Accuracies (1)	
Channel	45
Constellation	GPS L1C/A, GLONASS L1, BDS B1, Galileo E1, APGS
Autonomous	2~5 m HRMS

Communications	
Network modem	Nano-SIM card LTE FDD: B1/B3/B5/B7/B8/B20/B28/B2/B4/B12/B17 LTE TDD: B34/B38/39/40/41(100M) WCDMA: B1/B2/B5/B8 GSM: 850/900/1800/1900
Wi-Fi	802.11 a/b/g/n/ac, access point mode (2.4 G / 5G)
Bluetooth®	V 5.0
USB	Type-C, OTG supported
NFC	Support

Electrical	
Li-ion battery capacity	9000 mAh
Operating time (2)	20+ hours
Charging time	4 h (typical)

Sensors & Multimedia

13 MP rear camera with auto-focus and flash
Professional high-light flashlight
GNSS (BDS, GPS, GLONASS) A-GPS support
G-sensor
E-compass
Light sensor
Speaker
Microphone

Standard Accessories

A/C charger
USB cable
Stylus
Handstrap
Range pole bracket

Field Software

CHCNAV LandStar App (90-day trial version included)
3rd party Android applications

Certifications

CE, FCC, EAC, FAC,UN38.3

*All specifications are subject to change without notice.
(1) Accuracy and reliability are determined under clear unobstructed conditions, multipath, satellite geometry and atmospheric conditions. Performances assume minimum of 5 satellites, follow up of recommended general GPS practices.
(2) 25°C continous data collection, 100% brightness.

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