CHC M6 GNSS RTK

by Sinov · Smart RTK Surveying System · Technical Specifications

Smart GNSS RTK receiver by Sinov, part of the CHC group. Tilt survey calculates the true offset from heading and tilt angle, so points can be measured without centring the pole bubble. Rugged aluminium-alloy housing, IP68, 2 m drop resistant, with 4G, Wi-Fi, Bluetooth and NFC pairing.



Tilt survey	**IP68 · IK08**	**12 h RTK battery**	**32 GB memory**

Receiver

Satellite tracking	Full BeiDou constellation, 220 channels
Operating system	Linux
Initialization time	5 s
Initialization reliability	Greater than 99.99%
Data output rate	Up to 20 Hz
Breathable waterproof membrane	Yes
Buttons & indicators	1 power key, 1 FN key · LEDs: power, satellite, correction, Wi-Fi, data logging

Accuracy (1)

Static	Horizontal ±(2.5 mm + 0.5 ppm) · Vertical ±(5 mm + 0.5 ppm)
RTK	Horizontal ±(8 mm + 1 ppm) · Vertical ±(15 mm + 1 ppm)
Code differential	Horizontal ±(0.25 m + 1 ppm) · Vertical ±(0.50 m + 1 ppm)
Standalone	1.5 m
Tilt survey	Supported, with e-bubble automatic centring

Communication

Cellular	4G LTE / WCDMA / TD-SCDMA / GSM, all major carriers
Wi-Fi	802.11 b/g/n, hotspot mode for any smart device
Bluetooth	BT 4.0, backward compatible with BT 2.x · Windows, Android, iOS
NFC	Tap controller to receiver for automatic Wi-Fi pairing
Internal radio (optional)	0.1–2 W adjustable, 450–470 MHz, CHC protocol
Correction formats	RTCM 3.2, RTCM 3.x, CMR, CMR+, CMRx, RTCM 2.3
Ports	1 external UHF antenna port · 7-pin port (power, USB download, USB-drive upgrade) · 7-pin serial port (power, correction output) · SIM card slot
Data output	NMEA 0183, PJK plane coordinates, binary · via Bluetooth, Wi-Fi, RS-232, radio

Data storage

Memory	32 GB eMMC with space protection
Formats	HCN, RINEX, compressed RINEX
Logging	8 sessions simultaneously
Download	Plug-and-play USB, FTP push, HTTP download
Web interface	Receiver status, working mode, communication, static logging, data output · email alerts, remote upgrade

Power and physical

Power consumption	3.2 W
Battery	2 × 3,400 mAh, 7.4 V (50.32 Wh)
Operating time	Up to 12 h in RTK mode (2) · external DC 12–36 V
Dimensions	Ø 12.7 cm × 8.5 cm
Weight	0.99 kg or less
Housing	ADC12 aluminium alloy
Operating temperature	–45 °C to +75 °C
Storage temperature	–55 °C to +85 °C
Ingress protection	IP68
Impact	IK08 · survives 2 m drop

HCE320 controller (if included)

Operating system	Android 7.1
Processor	Octa-core
Memory	2 GB RAM + 16 GB ROM
Network	4G dual SIM
Display	5.5-inch AMOLED
Keyboard	Full physical keypad
Camera	8 MP
Battery	8,000 mAh, up to two days of field use
Protection	IP68
Software	CHC LandStar 7

(1) Accuracy depends on satellite geometry, number of satellites, observation time, ionospheric conditions and multipath. (2) Operating time depends on environment, temperature and battery age.

Specification sheet prepared by PT Mitra Survey ID from published CHC / Sinov M6 data. Specifications are subject to change by the manufacturer without notice. PT Mitra Survey ID · mitrasurveyid.com · info@mitrasurveyid.com · WhatsApp 0812-577-771 · Pamulang, Tangerang Selatan.