

**CHCN**AV

**M6**

**GNSS NETWORK  
RECEIVER**



**SURVEYING &  
ENGINEERING**

**SURVEY**YOUR<sup>®</sup>

# COMPACT AND RUGGED GNSS NETWORK SMART ANTENNA

The M6 GNSS receiver combines the performance of a multi-constellation GNSS receiver (GPS, Glonass, BeiDou and Galileo) with a compact design allowing simplified use and increased productivity in the field.

The M6 GNSS is the most suitable and cost-effective solution for surveying and setting out on all your projects, construction works, underground network mapping and survey control points. It features extended connectivity modules - Bluetooth®, Wi-Fi and 3.75G modem- allowing seamless connection to your preferred RTK network.

## MULTI-GNSS CONSTELLATION

### **Bring accuracy to your projects.**

The 220 channel GNSS core engine tracking GPS, GLONASS, Galileo and BeiDou signals provides high accuracy positioning results. The M6 GNSS secures the completion of your surveying projects with maximum productivity.

## OPTIMIZED FOR RTK NETWORKS

### **Boost your daily GNSS survey work.**

The M6 GNSS is an easy-to-use GNSS NTRIP Network RTK receiver optimized for topographic and construction survey projects. Getting field operators started on any new projects is achieved in a few minutes.

## EASY CONFIGURATION

### **Combined with LandStar7 or 3rd party applications.**

The M6 GNSS is perfectly integrated into CHCNAV LandStar7 data collection software for surveyors. Its embedded configuration web interface also allows seamless connection with any 3rd party software.

## COMPACT & RUGGED DESIGN

### **Easy to carry all-day long.**

Extremely compact and lightweight - less than 1 kg – the M6 is the ideal GNSS rover for all day long intensive fieldwork

 OPTIMIZED FOR  
GNSS RTK  
NETWORKS



**HIGH PERFORMANCE FOR  
SURVEY & CONSTRUCTION  
PROFESSIONALS**

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# SPECIFICATIONS

## GNSS Satellite Tracking

Channels	220
GPS	L1C/A, L1C, L2C, L2E, L5
GLONASS	L1C/A, L1P, L2C/A, L2P, L3
GALILEO	E1, E5A, E5B
BDS	B1, B2
SBAS	L1C/A, L5 (QZSS, WAAS, EGNOS, GAGAN)

## Positioning Accuracies<sup>(1)</sup>

Network RTK	Horizontal: 8 mm + 0.5 ppm RMS
	Vertical: 15 mm + 0.5 ppm RMS
	InitialisationTime: < 5 s
	InitialisationReliability: > 99.9%
Real time kinematics (RTK)	Horizontal: 8 mm + 1 ppm RMS
	Vertical: 15 mm + 1 ppm RMS
	InitialisationTime: < 5 s
	InitialisationReliability: > 99.9%
Post-processing kinematic (PPK)	Horizontal: 8 mm + 1 ppm RMS
	Vertical: 15 mm + 1 ppm RMS
Post-processing static	Horizontal: 2.5 mm + 0.5 ppm RMS
	Vertical: 3.5 mm + 0.5 ppm RMS
SBAS	0.5 m RMS

## Mechanical

Size (H x W)	83 mm × 127 mm (3.3 in x 5 in)
Weight	0.93 kg (2.1 lb) 1.04 kg (2.3 lb) with battery
Environment	Operating: -40°C to +65 °C (-40°F to +149°F)
	Storage: -40°C to +85°C (-40°F to +185°F)
Humidity	100% condensation
Dust and water proof	IP67
Shock and vibration	2 m (6.56 ft) fall onto concrete, MIL-STD-810G, Method 514.7
Tilt sensor	E-Bubble
	Tilt compensator <sup>(2)</sup>

## Certifications

FCC Part 15 (class B Device), FCC Part 22, 24, 90; CEMark; NGS Antenna Calibration; MIL-STD-810G, Method 514.7;

## Communications and Data Recording

Network modem	Integrated 3.75G modem
	HSPA+ 21 Mbps (download), 5.76 Mbps (upload)
	WCDMA850/900/1700/1900/2100
WiFi	EDGE/GPRS/GSM850/900/1800/1900
Bluetooth®	802.11 b/g/n, access point mode
Ports	V4.1
	2 x 7pin LEMO port (external power, data download, firmware update)
Data formats	RTCM2.x, RTCM3.x, CMRinput/output
	HCN, HRC, RINEX 2.11, 3.02
	NMEA0183 output
Data storage	NTRIP Client, NTRIP Caster
	32 GB internal memory

## Electrical

Power consumption	3.2 W (depending on user settings)
Li-ion battery capacity	3400 mAh, 7.4 V
Operating time <sup>(3)</sup>	Up to 6 h in RTK rover mode
External power input	12 V DC to 36 V DC



\*All specifications are subject to change without notice.

(1) Accuracy and reliability specifications may be affected by multipath, satellite geometry and atmospheric conditions. Performances assume the minimum of 5 satellites, follow up of recommended general GPS practices. (2) The accuracy of tilt compensator varies with operating environment and electromagnetic pollution. (3) Operating time varies based on temperature.

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**CHCNAV**

handheld  
AUTHORIZED RESELLER

OG-GPS

Pythagoras

MyCumulus

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