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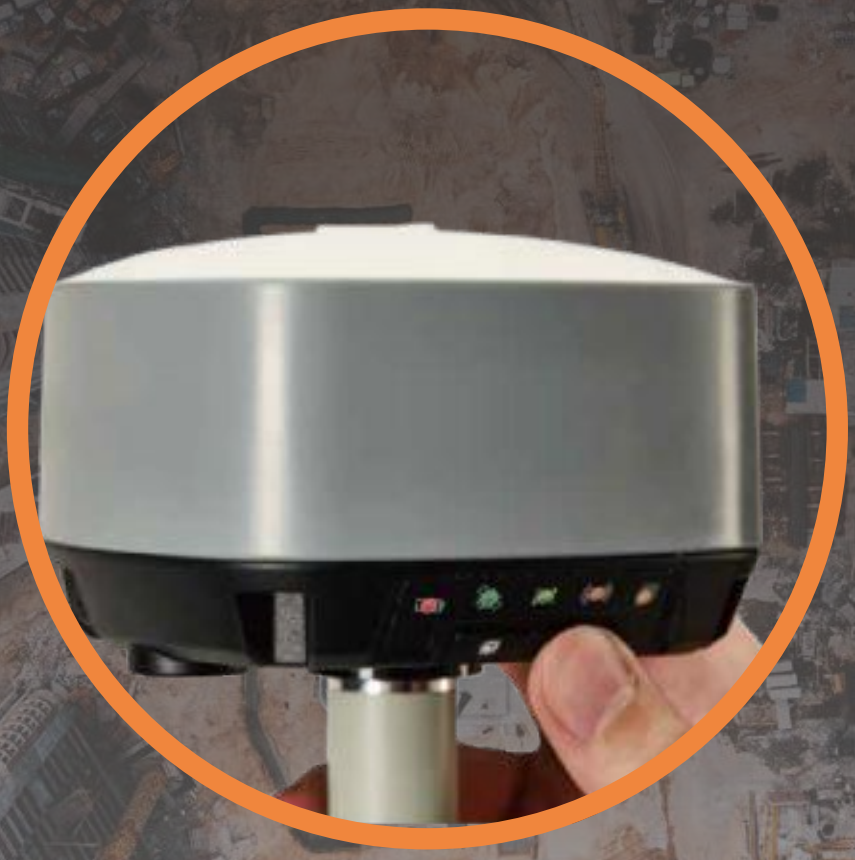
M6

GNSS NETWORK RECEIVER



SURVEYING & ENGINEERING

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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

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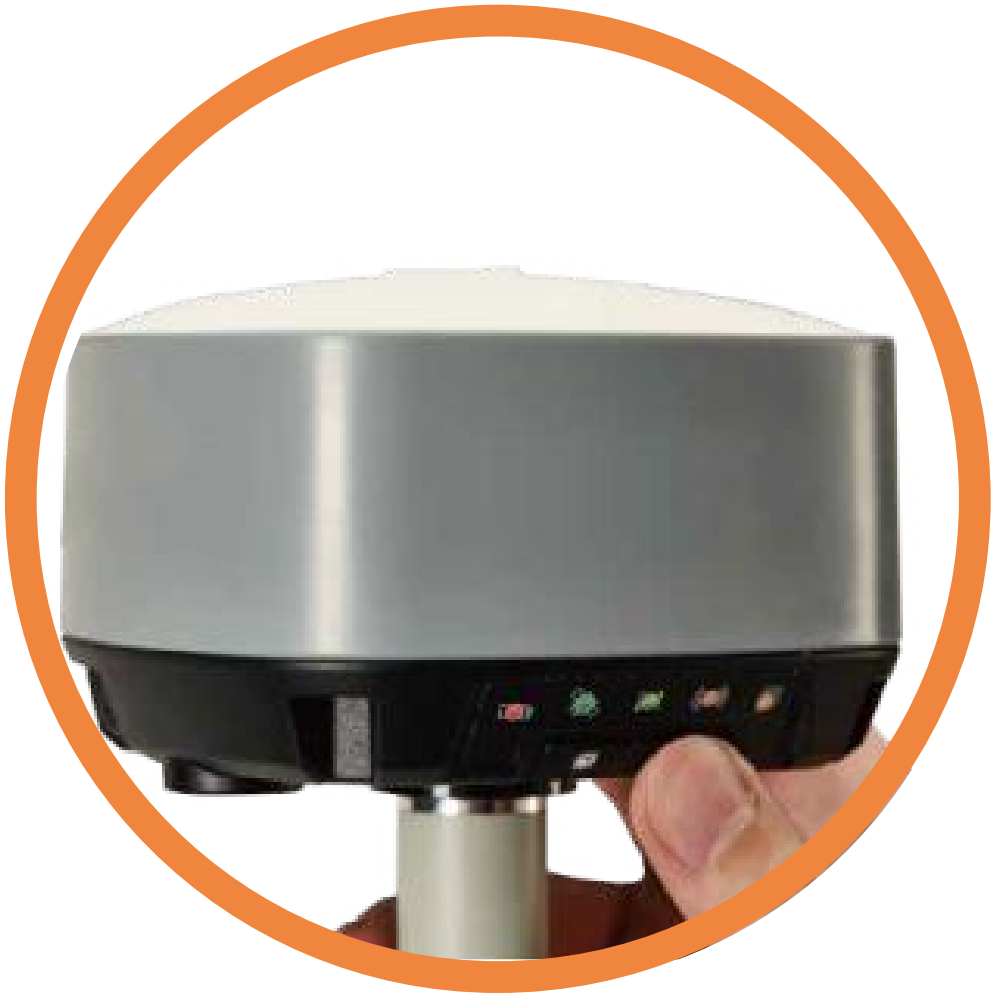
OPTIMIZED FOR GNSS RTK NETWORKS



HIGH PERFORMANCE FOR SURVEY & CONSTRUCTION PROFESSIONALS

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 [1]	
Network RTK	Horizontal: 8 mm + 0.5 ppm RMS Vertical: 15 mm + 0.5 ppm RMS InitialisationTime: < 10 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 [2]
Certifications	
FCC Part 15 (class B Device), FCC Part 22, 24, 90; CE Mark; 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) WCDMA 850/900/1700/1900/2100 EDGE/GPRS/GSM 850/900/1800/1900
WiFi	802.11 b/g/n, access point mode
Bluetooth®	V4.1
Ports	2 x 7pin LEMO port (external power, data download, firmware update)
Data formats	RTCM 2.x, RTCM 3.x, CMR input/output HCN, HRC, RINEX 2.11, 3.02 NMEA 0183 output NTRIP Client, NTRIP Caster
Data storage	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 [3]	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.