

M2 - Professional Base Station



The M2 Professional Base Station combines a powerful 5-watt radio with full-constellation satellite support. Delivering a robust cm-level positioning solution with an extended range of up to 8 km, it is the reliable cornerstone for large-scale surveying projects.



Powerful
5-watt radio



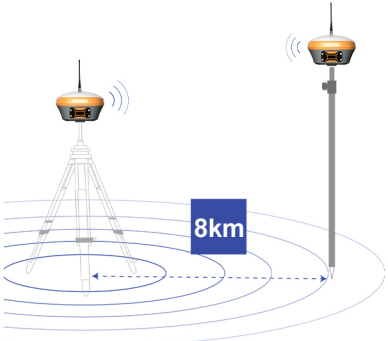
Operating Time:
Static working time: 50h
RTK working time: 15h



Communication Diversity
(Bluetooth, WiFi, 4G, Radio)



Full Support of
All Global Constellations



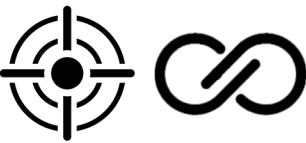
Longer Coverage Distance

Equipped with a 5W high-power radio, it achieves a typical operating coverage of 8km, more than 3 times that of ordinary 1-2W base stations. No need for additional external devices, addressing the signal coverage pain point of large-area operations.



Stable, Durable & Easy to Operate

Integrated design simplifies the setup process, enabling quick deployment by a single person.



Excellent Precision & Compatibility

Maintains centimeter-level positioning accuracy, meeting the high-precision requirements of surveying, construction and other fields. Compatible with mainstream rover stations and suitable for complex environments.

GNSS characteristics

Channels	UM980 1408 Channels, Powered by NebulasIV™
BDS	BDS B1I, B2I, B3I, B1C, B2a, B2b
GPS	L1C/A, L1C, L2C, L2P(Y), L5
Galileo	E1、E5a、E5b、E6
GLONASS	G1, G2, G3
QZSS	L1C/A, L1C, L2C, L5, L6
NavIC	L5
SBAS	L1C/A
PPP	B2b & Has
IMU update rate	20Hz
Real time kinematic (RTK)	H:± (8+1×10 ⁻⁶ D) mm V:± (15+1×10 ⁻⁶ D) mm
Static and rapid static	H:± (2.5+0.5×10 ⁻⁶ D) mm V:± (5+0.5×10 ⁻⁶ D) mm

Electrical

Battery Specifications	3.65V 24000mAh
Input Voltage	Rated Input Voltage: 5-Pin Port: 15V DC, 2A Type-C Port: 12V DC, 1.5A

Communications and data storage

Operating System	Linux
Built-in Storage	On-board Storage: 8 G
Bluetooth	V5.0+EDR (Backward Compatible) / BLE
Wi-Fi	802.11 a/b/g/n/ac
Network Communication	4G Supported
Radio	Transceiver: 5W, Supports LoRa Frequency: 410~470MHz

Protocols	TrimTalk 450S、PCC-GMSK、PCC-4FSK、Satel、 Satel_ADL、HITARGET(9600)、HITARGET(19200)、 TrimTalk(4800)、HZSZ、TrimMark III、 South 9600、South 19200、GEOTALK、GEOMARK、 PCCFST、PCCFST_ADL、PCCEOT_SATEL
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MEMS	Max. 60° Supported; Accuracy: 8mm+0.3mm/°tilt; Pole Tip Positioning Accuracy: Within 2cm at 30° Tilt
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TNC	Connecting Built-in Radio Antenna
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5-Pin Connector	External Power Supply and External Radio
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Type-C Port	Charging and Data Transmission
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SIM Slot	SIM Card
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Hardware

Buttons	Power Button (For Power On/Off) Short Press to Broadcast Current Working Mode and Status
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Display Screen	Equipped
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Dimensions	151mm*110mm (Including TNC; 97mm Excluding TNC)
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Weight	1.5Kg
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Operating Temperature	-30℃ ~ +65℃
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Storage Temperature	-40℃ ~ +80℃
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Waterproof & Dustproof	IP67
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Drop	Withstands 2m Pole Drop (Hardwood Floor) and 1.2m Free Fall at Room Temperature
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Humidity	100% Condensation Resistant
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