M10-B Technical Specification

GNSS Performance	
Positioning System	Full system, all frequency points
Satellite Frequency	BDS： B1I、BIC、B2I、B2a、B2b、B3I GPS： LIC/A、LIC、L2、L5 GALILEO： E1、E5a、E5b、E6 GLONASS： G1、G2 QZSS： LIC/A、LIC、L2、L5 NavIC： L5 SBAS： LIC/A
RTK accuracy	Plane: 0.7cm + 1ppm Elevation: 2cm + 1ppm
Time accuracy	10ns
Speed measurement accuracy	0.05m/s
Time taken for first positioning	Cold start: <30s
RTK initialization time	<5s (typical)
RTK Initialization Reliability	>99.9%
Physical Specifications	
Size	101X101X67
weight	434g
Middle rod thread	5/8-11
Battery Capacity	6800mAh
External Interface	Type-C
Protection Class	IP67
Performance Specifications	
Endurance Time	18 hours

Memory Card	TF Card (optional 16-128GB)
Bluetooth	Bluetooth
WIFI	IEEE802.11b/g/n
INS performance	
accelerometer	Measurement range: ±8g
	Bias instability: 25μg
	Random walk: 0.05m/s/√h
Gyroscope	Measurement range: ±500°/s
	Zero bias instability: 5.0°/h
	Random walk: 0.3°/√h
tilt measurement index	Pitch, Roll: ⩽0.1° (1σ)
	Heading: ⩽0.4° (1σ)
	Data output frequency: 100Hz
Tilt measurement accuracy	Accuracy: 1.0 cm (within 30 degrees)
Initialization speed	1-2s
Working Environment	
Operating Temperature	-20°C~70°C
Storage Temperature	-20°C~70°C
Data transmission performance	
Operating Frequency	410-470 MHz
Carrier Power	1.5W or 0.5W
Modulation Mode	GFSK/4FSK
Protocol Version	SOUTH、TRIMTALK、TRANSEOT、TRIMMARK3、 Transmission protocols such as SATEL
Air Speed	9600bps、19200bps
Operating Temperature	-40~+75°C