

Appendix

Specifications

GNSS Receiver	GNSS Frequency	Simultaneously receive: GPS: L1, L2, L5; BeiDou: B1, B2, B3 GLONASS: F1, F2; Galileo: E1, E5A, E5B
	Positioning Accuracy	Single Point Horizontal: 1.5 m (RMS) Vertical: 3.0 m (RMS) RTK Horizontal: 1 cm + 1 ppm (RMS) Vertical: 2 cm + 1 ppm (RMS) 1 ppm: For every 1 km increase in distance, the accuracy will be 1 mm less. For example, the horizontal accuracy is 1.1 cm when the receiving end is 1 km away from the base station.
	Positioning Update Rate	1 Hz, 2 Hz, 5 Hz, 10 Hz and 20 Hz
	Cold Start	< 45 s
	Hot Start	< 10 s
	Recapture Time	< 1 s
	Initialization Reliability	> 99.9%
	Differential Data Format	RTCM 2.x/3.x
Communication and Data Storage	Data Link	OcuSync, Wi-Fi, LAN, 4G
	Operating Frequency	2.400 GHz to 2.483 GHz (China, United States, Australia, Europe, Japan, Korea) 5.725 GHz to 5.850 GHz (China, United States, Australia)
	EIRP	OcuSync 2.4 GHz FCC (United States, Australia) / NCC (Taiwan, China): < 26 dBm SRRC (Mainland China) / CE (Europe) / MIC (Japan) / KCC (Korea): < 20 dBm 5.8 GHz FCC (United States, Australia) / SRRC (Mainland China) / NCC (Taiwan, China): < 26 dBm Wi-Fi 2.4 GHz FCC (United States, Australia) / NCC (Taiwan, China): < 22 dBm SRRC (Mainland China) / CE (Europe) / MIC (Japan) / KCC (Korea): < 20 dBm 5.8 GHz FCC (United States, Australia) / SRRC (Mainland China) / NCC (Taiwan, China): < 22 dBm
	Communication Distance	OcuSync: 2 km (FCC/SRRC, unobstructed and free of interference, when the distance from the D-RTK 2 antenna to the bottom of the tripod is 1.8 m, when the difference in height between the remote controller and D-RTK 2 is less than 2 m, and when the remote controller is 1.2 m from ground level)
	Memory Capacity	16 GB

IMU	Features	Built-in high-precision 6-axis accelerometer D-RTK 2 movement monitoring Sloping measurements Electronic bubble level
Electrical Characteristics	Power Consumption	12 W
	Power Supply	16.5 to 58.8VDC
	Battery	Type: Lithium-ion battery Capacity: 4920 mAh Energy: 37.3 WH
Physical Characteristics	Run Time	WB37 battery: > 2 h MG-12000P battery: > 50 h
	Dimensions (D-RTK 2 body with extension rod)	168 mm × 168 mm × 1708 mm
Operating Temperature	IP Rating	IP65
		-4° to 131° F (-20° to 55° C)

EN



Power Consumption

Power Consumption (W) vs. Temperature (°C)

