

SPECIFICATIONS

Marvel Lite GNSS Receiver

SPECIFICATIONS		
GNSS Performance	Channels	1408
	Satellites Tracking	GPS:L1C/A/L2P(Y)/L2C/L5
		GLONASS:L1/L2
		BDS:B1I/B2I/B3I/B1C/B2a/B2b
		Galileo:E1/E5a/E5b/E6
		QZSS:L1/L2/L5/L6
		SBAS:L1
	Positioning Rate	Up to 50Hz
	Operation System	Gd32
	Initialization Time	<5s(Typical value)
	Initialization Reliability	99.99%
	Static Horizontal Accuracy	$\pm(2.5\text{mm}+0.5\times 10^{-6}\times \text{D})$
	Static Vertical Accuracy	$\pm(5\text{mm}+0.5\times 10^{-6}\times \text{D})$
IMU Sensor	RTK Horizontal Accuracy	$\pm[8\text{mm}+1.0\times 10^{-6}\times \text{D})$
	RTK Vertical Accuracy	$\pm(15\text{mm}+1.0\times 10^{-6}\times \text{D})$
	IMU	Supported
Data Output	Accuracy	Less than 2cm within 60°
	Tile angle	0~120°
	Correction Data	RTCM2.X, RTCM3.X
Function Configuration	GPS Data	NMEA0183s RJK, Binary
	Tilt Survey	Supported
	PPK Survey	Supported
	Buzzer	Supported
	NFC	Supported
	Size	120*89mm
Feature	Weight	0.63kg
	Indicator Light	Satellite+data+power+Bluetooth
	Operating Temperature	-45℃~+75℃
	Storage Temperature	-55℃~+85℃
	Water/Dust Proof	Ip67
	Shock Resistance Grade	Ik08
	Shock	Survive 1.8m drop
Static Data Recording	Static Data Format	TXT
	Data storage	8G
	Battery Capacity	7.4V, 7000mAh
Electrical	Working Time	Network Mode: 46h Radio Reception:38h Radio Transmission:14h
	External Power	USB Type-C power,power bank supported
	I/O Port	1*USB Type-C(power,supply and charge) 1*SMA radio antenna port 1*5-pin lemo port(9V-14V)
Communication	Wireless Communication	Supports Buletooth,controller 4G,B1/B3/B5 /B7/B8/B20B38/B40/B4B1/B5/B883/B8GPS/GLONASS/BDS (Compass)/Galileo/QZSS
	Radio TransmitPower	2W
	Long Range radio(Lora)	Supported
	Internal Radio Frequency	410-470 MHZ
	Protocol	TRIMTALK450S, SATEL,TRIMMARK III, TRANSEOT,SOUTH,INTALK(LoRa)

15KM

LONG RANGE RADIO PROTOCOL REACH TO



MARVEL LITE

Universal GNSS Receiver



SBAS&GBAS



Tilt Survey



Interference
Suppression



Instantly
Fixed