



Absolutely Precise



# KRYPTON GNSS Receiver

with Calibration-Free Tilt Compensation











The Kryptton GNSS Receiver is a new generation GNSS RTK system. It supports calibration-free tilt compensation function, which is immune to magnetic disturbances, leveling pole is not required. Easy configuration with 1.54inch interactive screen on Ultimate and Advanced versions. With an internal high-performance multi-constellation and multi-frequency GNSS board, the Kryptton GNSS Receiver can provide high accuracy and stable signal detection.

The high-performance antenna can speed up the time to first fix (TTFF) and improve anti-jamming performance. The built-in large capacity battery is detachable, two batteries support up to 16 hours in 4G/3G/2G Network and Rover Radio mode. The built-in UHF radio module supports long distance communication. The rugged housing protects the equipment from harsh environments.



## Key Features

-  Supports multiple constellations & frequencies: GPS, GLONASS, BeiDou, Galileo, SBAS, QZSS, GAGAN
-  Supports 576 channels
-  410-470MHz UHF radio, 4G network, Wi-Fi, Bluetooth, NFC
-  Tilt compensation without calibration, immune to magnetic disturbances
-  Various working modes
-  16GB/8GB internal storage
-  Up to 16 hours working in 4G/3G/2G network and Rover radio mode
-  IP67-rated dust- & waterproof enclosure, for

# Kryptton

## GNSS RTK Receiver with Calibration-Free Tilt Compensation

### Performance

Signal tracking:	
GPS L1, L2, L5; GLONASS L1, L2; BeiDou B1, B2, B3; Galileo E1, E5a, E5b; QZSS L1, L2, L5; SBAS (EGNOS, WAAS, MSAS, GAGAN) L1C/A	
Channels:	576
High-Precision Static (RMS):	
– Horizontal:	3mm+0.1ppm
– Vertical:	3.5mm+0.4ppm
Static & Fast Static (RMS):	
– Horizontal:	3mm+0.5ppm
– Vertical:	5mm+0.5ppm
Post Processed Kinematic (RMS):	
– Horizontal:	8mm+1ppm
– Vertical:	15mm+1ppm
Real Time Kinematic (RMS):	
– Horizontal:	8mm+1ppm
– Vertical:	15mm+1ppm
Network Real Time Kinematic (RMS):	
– Horizontal:	8mm+0.5ppm
– Vertical:	15mm+0.5ppm
Initialization (typical):	<10s
Initialization Reliability:	>99.9%
Tilt Compensation Accuracy (within 30°)	≤2cm <sup>(2)</sup>

### System & Data

Operating system:	Linux
Storage:	built-in 16GB/8GB <sup>(2)</sup>
Data format:	CMR, CMR+, RTCM2.X/3.X
Data output:	RINEX, NMEA-0183, Binary

### Software Support

Kryptton Nuwa	
MicroSurvey FieldGenius	

### Communication

Cellular:	4G LTE/TD-SCDMA/WCDMA/GPRS/GSM
Network protocols:	Ntrip Client, Ntrip Server, Caster Service
Wi-Fi:	802.11b/g <sup>(3)</sup>
Bluetooth:	4.1
USB OTG:	USB 2.0 x1
Serial ports:	RS232 x1
Internal radio:	
– Power:	0.5W/1W/2W
– Frequency:	410MHz ~ 470MHz
Distance (Typical):	>5km
Radio protocols:	TrimTalk450, TrimMark 3, South, Transparent, Satel

### Electrical

Input voltage:	9~28V DC
Power consumption (typical):	
Network or Radio receiving mode:	≈ 5W
Radio transmitting mode (0.5W):	≈ 8W
Radio transmitting mode (1W):	≈ 9W
Radio transmitting mode (2W):	≈ 11W
Lithium battery:	6400mAh 7.4V x2 <sup>(1)</sup>

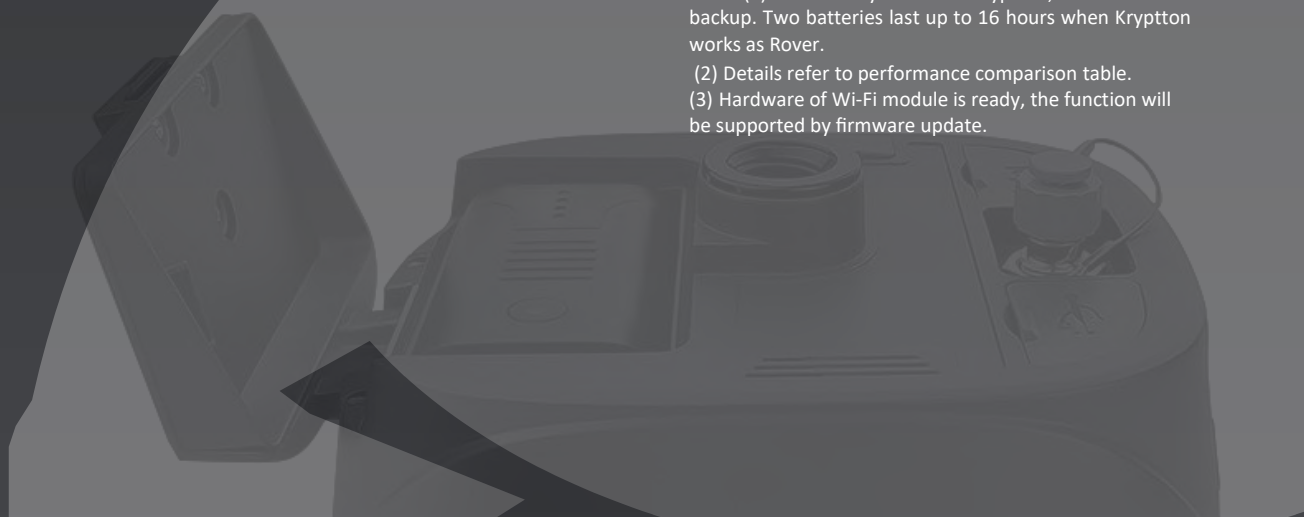
### Physical

Display:	1.54" OLED <sup>(2)</sup>
Dimension:	157x157x103mm
Weight:	≈ 1.2kg (without battery) ≈ 1.4kg (with a battery)
Operating temperature:	-40°C ~ +75°C
Storage temperature:	-55°C ~ +85°C
Relative humidity:	100% not condensed
Dust- & Waterproof:	IP67
Pole drop onto concrete:	2m

Note: (1) One battery is used in Kryptton, the other is for backup. Two batteries last up to 16 hours when Kryptton works as Rover.




(2) Details refer to performance comparison table.

(3) Hardware of Wi-Fi module is ready, the function will be supported by firmware update.



# Version Comparison

The Kryptton GNSS Receiver has three versions: **Ultimate**, **Advanced**, and **Basic**. It provides selectivity for the requirement from different users.

Version	Display	LED Indicators	Tilt Compensation (IMU)	Memory	Common Specifications
	1.54" OLED	Satellite, Tilt, Correction Data, Power	✓	16GB	<ul style="list-style-type: none"> <li>• 576 Channels</li> <li>• GPS L1, L2, L5; GLONASS L1, L2; BeiDou B1, B2, B3; Galileo E1, E5a, E5b; QZSS L1, L2, L5; SBAS (EGNOS, WAAS, MSAS, GAGAN) L1C/A</li> <li>• Integrated GNSS Antenna</li> <li>• FN, ON/OFF buttons</li> <li>• Bluetooth; NFC; UHF Radio; 4G</li> <li>• Electronic Bubble</li> <li>• USB OTG</li> <li>• 2x 6400mAh Battery Capacity; Smart Battery with power display</li> </ul>
	1.54" OLED	Satellite, Static, Correction Data, Power	—	16GB	
		Satellite, Static, Correction Data, Power, Bluetooth, Solution Status	—	8GB	

Absolutely Precise

Kryptton is a leading GNSS RTK solution provider. Our engineers have been pioneers in the design of GNSS products to support high-precision positioning applications.

Designed for easy and rapid integration, our GNSS solutions offer centimeter-level positioning accuracy and flexible interfaces for a variety of applications including: unmanned aerial vehicle (UAVs), surveying, mapping, construction, engineering, and precision agriculture.



To learn more, visit: [www.zcount.co.in](http://www.zcount.co.in)  
 Sales inquiry: [sales@zcount.co.in](mailto:sales@zcount.co.in)  
 Technical support: [info@zcount.co.in](mailto:info@zcount.co.in)

Descriptions, specifications and related materials are subject to change.  
 ©2019 Z-Count Technologies Pvt. Ltd. All rights reserved.