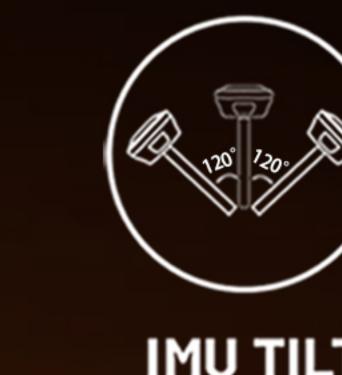
# Specification>>>

Performance Specification	
	GPS: L1C/A, L1C, L2P(Y), L2C, L5
	GLONASS: L1, L2,L3
Satellite signals tracked	BEIDOU: B1I, B2I, B3I, B1C, B2a, B2b
simultaneously	GALILEO: E1, E5a, E5b,E6
	QZSS: L1, L2, L5, L6
	SBAS: L1, L5
	IRNSS: L5
Channels	1408 tracking Channels
Cold start	<60 s
Hot start	<15 s
Positioning output rate	1Hz - 20Hz
Signal Reacquisition	<1s
RTK Initialization time	<10s
Initialization Reliability	>99.99%
Time accuracy	20 ns
Positioning <sup>1</sup>	
	Horizontal: 0.25 m + 1 ppm RMS
Code differential	Vertical: 0.50 m + 1 ppm RMS
GNSS positioning	SBAS differential positioning
	accuracy: typically <5m 3DRMS
Static GNSS surveying	Horizontal: 2.5 mm + 0.5 ppm RMS Vertical: 5 mm + 0.5 ppm RMS
)   Tipo -	vertical o illili too ppili nivio
Real Time Kinematic Surveying	
Single Baseline < 30 KM	Horizontal: 8 mm + 1 ppm RMS
	Vertical: 15 mm + 1ppm RMS
Network RTK <sup>³</sup>	Horizontal: 8 mm + 0.5 ppm RMS
	Vertical: 15 mm + 0.5 ppm RMS
HARDWARE	
PHYSYCAL	
Material	Magnesium alloy
Dimensions	$131\times64mm$
weight	0.76kg
Operating temperature	-40°C to + 75°C
Storage temperature	-55°C to + 85°C
	IP67 dust proof, protected from
Protection IP	30min immersion to depth of 1m
Shock	Survive 2 m drop onto the concrete
Vibration	MIL-STD-810G
Humidity	100%, condensing
ELECTRYCAL	10070, corractioning
Power	9~24 V DC external power
USB Type-C fast charging	Support
Battery capacity	Internal 7000mAh lithium-ion battery
battery capacity	
	Rover Mode: 15 hours
Battery Life	Base Mode: 7 hours
	Static Mode: 17 hours
Communication & Data Storage	
I/O interface	
EMO port (5pin)	Supports power input, serial port control,
···· por (opin)	and external radio communication
JSB Type-C port	Charging
Sim card slot	Supports Nano-SIM
Antenna port	UHF antenna interface
Radio modem	
	1/2 w switchable,Work range can reach to
Transmit power	15km under AlphaTalk15 protocol
requency band	410MHz-470MHz; supports to set the frequency
Protocols	AlphaTalk15, TrimTalk450s, SOUTH, Satel,PCC-EOT
rotocois Cellular	Alphaiaik 19, Illilliaik4303, 300 ITI, 3alei,FCC-EOI
ntegrated full frequency multi band 4G modem, sup	ports WCDMA/CDMA2000/TDD-LTF/FDD-LTF
	/porce 11 colin (, co
NIFI 202 11 h/a standard, accoss noint & client mode, sur	norts accoss to hotspot for correction transmission
	oports access to hotspot for correction transmission
Sulles in the supertie of Discrete and by VC 2 many and a COmmunity	
Fully integrated Bluetooth V5.2, range ≤ 50m	
Data format	
RTCM2x, RTCM3x, CMR & CMR+, sCMRx, Dat, RINEX,	NMEA outputs
torage	
GB internal memory, supports cyclic storage; with a	bility to collect over one year raw observation based on 5 seconds interval
Others	
System integration	
OS system	Intelligent LINUX operating system
Filt Compensation	IMU up to 120° (Calibration free)
Supported controllers	All android devices with supported software
Design	, aa. a. a. a. a. a. a. a. a. a. a
outton	Power key
,	•
	Power indicator, data link indicator,
ndicator	
ndicator	satellite indicator, Bluetooth indicator
Indicator Voice	

Support WEBUI configuration



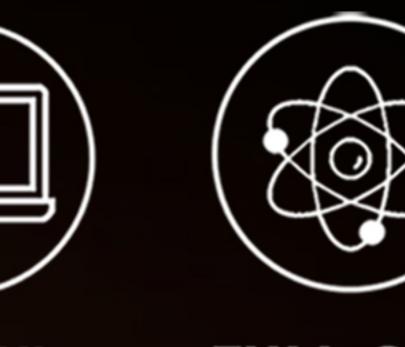
# PRECISE











**FULL GNSS** 

# Product Introduction >>>

L100 PRO is a new generation of compact smart GNSS receivers designed for various surveying projects using latest GNSS features. This receiver equipped with modern required technologies such as Bluetooth module, IMU tilt sensor, 7000mAh lithium-ion internal battery, etc. L100 PRO is able to work in different work modes (Network RTK, Static & PPK) based on different required accuracy & conditions. L100 PRO is the most economic GNSS package you can purchase to fulfill your technical needs on field!

### Multi constellation

L100 PRO with its 1408 channels new generation full GNSS chipset & ability to support multiple satellite constellation including GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS and IRNSS provides precise and accurate spatial data for all users around the world.

#### WiFi and WebUI

L100 PRO serves as a WIFI hotspot, so users can easily access, manage the status, set the configuration or download static and PPK raw data through advanced WebUI using computer, smartphone or other electronic devices with WIFI support without any need to third party software or cable.

#### **IMU Tilt Sensor**

L100 PRO is equipped with a fast initialization, calibration free & immune to magnetic interference Inertial Measurement Unit (IMU). All users can use this technology to collect or stakeout topo points up to 120°.

## Working mode

Every surveyor needs to operate and choose suitable working method based on project requirements and required accuracy. In order to work in such condition users will need a device to be able to work in different modes such as Static, Network RTK, UHF RTK, PPK & etc. L100 PRO is offering all you need in a package!

#### **IP67**

Choosing a small, light but professional, reugged GNSS receiver has always been a concern among professional surveyors. L100 PRO with its high quality magnesium alloy body provides such advantages without decreasing quality or notable increase in price.

## **Battery & Power**

L100 PRO is delivered with an internal large capacity 7000mAh lithium-ion internal battery supporting USB type-C fast charging which allows users to work for more than 12 hours in daily field work.

# GSM & UHF radio

**15KM** 

12h

A fast internet connection is guaranteed with a built-in 4G module that accelerate receiving correction data using all telecommunication signals and bands. L100 PRO comes with an integrated 15 km-range Tx/Rx internal UHF radio that ranges from 410 MHz to 470 MHz with selectable frequency providing ability to connect and collect accurate real time data in Base/Rover mode.