GNSS Positioning System

PULSAR R6p
NOVA R6i

RUIDE

Crafted for iPositioning.

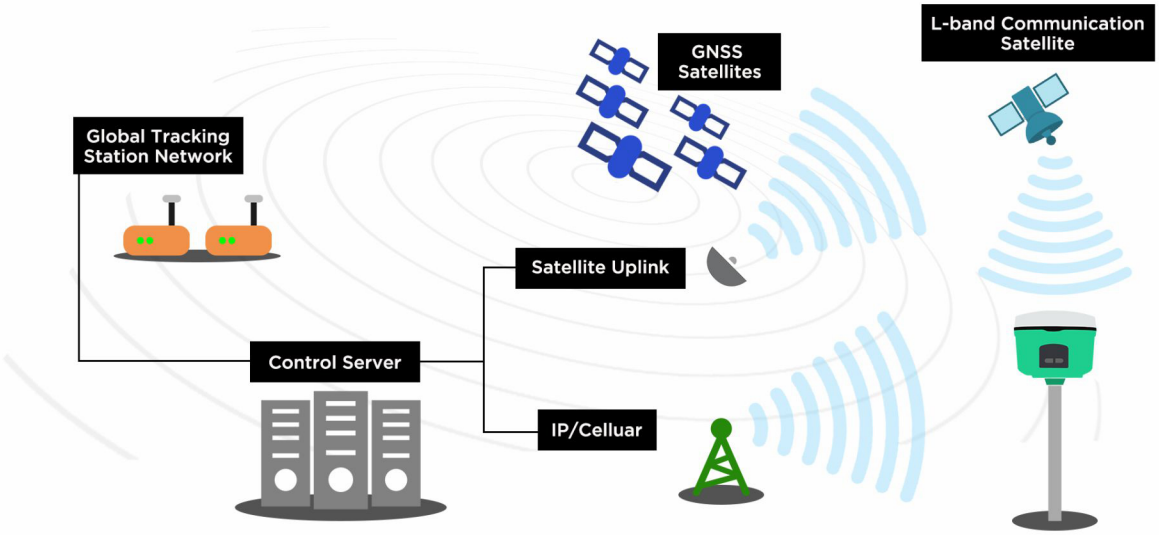
Inspiring

336 Channels, All Constellations

With OEM board Pacific Crest BD990, R6p always delivers centimeter-accuracy to a variety of applications. That enables R6p to support a wide range of satellites signals, including GPS, GLONASS, BeiDou, Galileo, SBAS, etc.

Global Rover Correction

Using the L-band communication satellites and Internet, one rover of PULSAR R6p delivers horizontal accuracies up to 2cm even in any isolated places worldwide, without a base receiver or reference station.



Intelligent

Linux OS

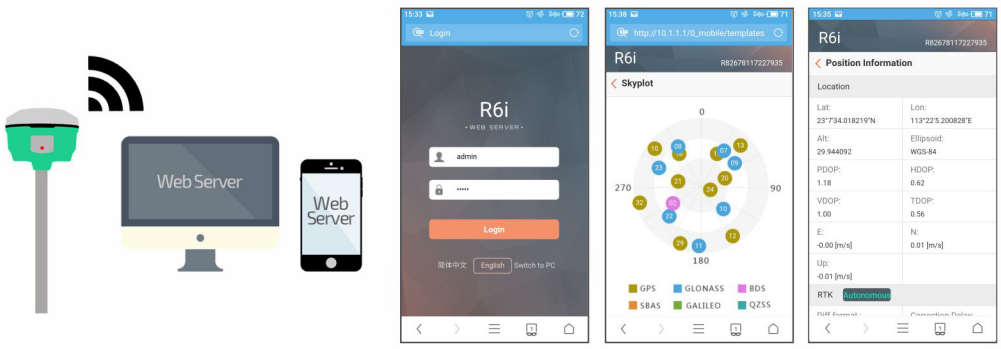
Powered by the new generation of embedded Linux operating system, the R6p and R6i has a greatly improved RTK performance and efficiency. One unique core processing mechanism is able to response to more than one command at one time.

Voice Prompt

No need to check out the controller, you can hear the working status from the speaker.

WiFi and Web Server

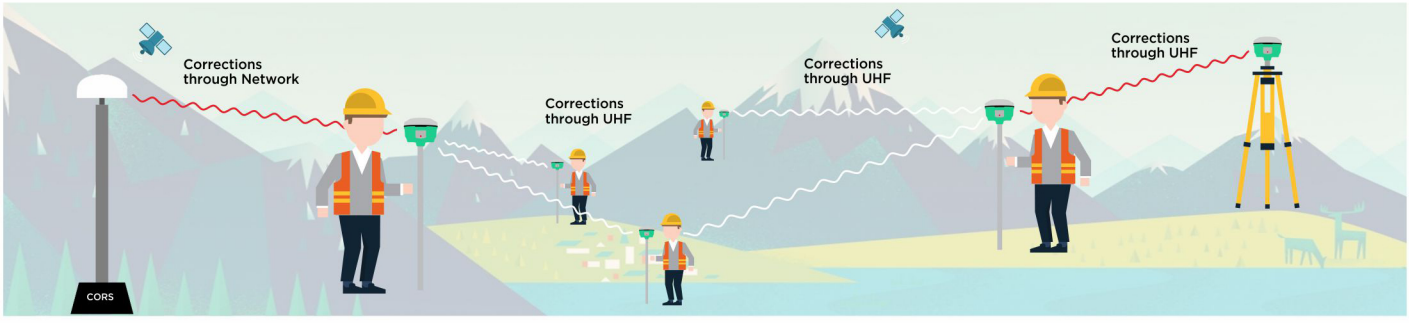
By connecting through the integrated WiFi, you can log on a user-friendly management platform on the browser of your phone or computer. All status monitoring and parameter settings can be achieved wirelessly in a fast and easy way.



Interconnected

Network Data Link
Built-in 4G network module, integrated with antenna. No need to install an external network antenna. Supports more telecom standards: WCDMA, CDMA2000. FDD-LTE, TD-LTE, and also GPRS and EDGE.

Radio Data Link
New radio module provides up to 3W output, extending the working area from 3km to maximum 8km. Radio router and repeater functionalities can be realized to serve more receivers in the field.



Radio Router **Radio Repeater**

Integrated

Memory
8GB SSD internal memory. Supports USB pen drive as external storage. Cyclic Storage program allows overwriting automatically the old data when the disk is full. Supports more raw data format: Rinex 2.01, Rinex 3.02. Sample rate of raw data storage can reach to 50Hz.

OTG
One more easier way to download data anywhere anytime.

Simple Operation
One button covers all you will need to achieve any operations.

Tilt & Bubble
Tilt sensor will set you free from maintaining the pole strictly vertical. Within up to 30° tilt, the field software will correct to the actual coordinates automatically without any additional operation.

Ingenious

Industrial Proof
Outstanding design of housing made of Magnesium alloy provides excellent proof on shock, dust, water, and electromagnetic.

Worry-free Power Scheme
The new power supply system of R6p allows 2 batteries loaded, with hot-swapping feature which ensures a non-stop operation.
Besides, there're 2 gadgets to extend the operation time.
PowerHub is a specific power bank containing 4 receiver's batteries, which is able to hung on a tripod as an external power.
Powerod is a smart short stick with Li-on battery cells inside, which is able to connect with R6p and the pole.

PowerHub

Powerod

PULSAR R6p
NOVA R6i

RECEIVER SPECIFICATION

Mother Board	Pacific Crest BD990[P] | BD970[i]
Channels	336[P] | 220[i]
GPS Tracking	L1C/A, L1C, C2C, L2E, L5
GLONASS Tracking	L1C/A, L1P, L2C/A, L2P, L3
BeiDou Tracking	B1, B2
Galileo Tracking	GIOVE-A, GIOVE-B, E1, E5A, E5B
SBAS	L1C/A, L5
L-Band[P]	Global Rover Correction[P]
Positoning Rate	1-50Hz

RECEIVER ACCURACY

Code Differential	Horizontal 0.25m±1ppm (rms)
	Vertical 0.50m±1ppm (rms)
Static	Horizontal 2.5mm±0.5ppm (rms)
	Vertical 5mm±0.5ppm (rms)
Real-Time Kinematic	Horizontal 8mm±1ppm (rms)
	Vertical 15mm±1ppm (rms)
Network RTK	Horizontal 8mm±0.5ppm (rms)
	Vertical 15mm±0.5ppm (rms)
L-Band[P]	Horizontal 2cm (rms)[P]
	Vertical 5cm (rms)[P]

INTERFACES

Button	Two[P] | One[i]
LED Indicator	Bluetooth, Data Link, Satellite, WiFi[P], Power[P]

COMMUNICATION

I/O	5pin LEMO external power +RS232
	7pin LEMO USB (OTG) + Ethernet
	Radio antenna interface
	SIM card slot
UHF Radio Module	1/2/3W switchable
	410-470MHz
Protocol	TrimTalk 450s, TrimMark3,
	PCC EOT, SOUTH
GSM/GPRS Module	WCDMA, CDMA2000, TD-LTE,
	FDD-LTE, GPRS, EDGE
WiFi	802.11b/g
	Hotspot
	Data Link
Bluetooth	Bluetooth 2.1 +EDR and 4.0
NFC	<10m

DATA STORAGE

Type & Storage	SSD 8GB
	External USB pen drive
Date Transfer	USB transfer
	Supports FTP/HTTP download
Data Format (Differential)	CMR+, CRMx, RTCM 2.1, RTCM 2.3,
	RTCM 3.0, RTCM 3.1, RTCM 3.2
GPS Output Format	NMEA 0183, PJK plaine coord.,
	binary code, Trimble GSOF
Network Model	VRS, FKP, MAC
	NTRIP fully supportable

SENSORS

Tilt	Within 30°
E-bubble	Yes
Thermometer	Yes

POWER SUPPLY

Supply Type	Dual batt., hot-swapping[P] | 1[i]
Voltage	9-25V DC; Overvoltage protection
Battery	Removable Li-on 7.4V, 3400mAh
Operating Time (1 batt.)	Static mode 13h
	Rover mode 10h
External Power	PowerHub (external power bank)
	Powerod (smart power pole)[P]

PHYSICAL

Dimension	125mm (H), 135mm (W)[P]
	129mm (H), 112mm (W)[i]
Weight with batt.	1390g[P] | 970g[i]
Operating Temperature	-45°C to 80°C
Protection Class	IP67
Shock	2m drop on hard surface
Vibration	40G 10ms sawtooth wave

Recommended Partners

X11 Pro

Windows Mobile 6.5
1GHz, 512RAM, 8GB ROM
3.7" TFT
72 channels GNSS tracking
WiFi, Bluetooth
Camera
SIM card slot
Alphanumeric keyboard
IP67

FIELDGenius

Code-free linework
HD graphics
Intuitive interface
Easy stakeout
Productivity tasks
Calculation tools

HX-U202

Max. 35W output
410-470MHz
TrimMark, TrimTalk,
SOUTH protocol
RS232, 5pin LEMO
IP67

CE FC

RUIDE

7F, Sicheng Road, Guangzhou 510663, China
+86-20-23380961
http://www.ruide.xyz
support@ruideinstrument.com

ruideinstrument
RUIDEPositioning