

Tersus David

GNSS Receiver

The **Tersus David** is a cost-efficient, palm-sized GNSS receiver designed for UAVs, AGVs, and surveying applications. Using an external GNSS antenna, the free Tersus Survey App and post-processing software, the David GNSS receiver is a low-cost solution for all survey applications, including real-time RTK positioning and data collection for PPK.

Features

Seamless Integration with Mobile Phone

- Free survey App available

Versatile Communication & I/O Interface

- Easy connection to an external radio module for long range communications
- Bluetooth module establishes wireless connection in seconds

Wide Range of Applications

- Paired with a smartphone, the David GNSS receiver can operate as a base, rover and GIS data collector

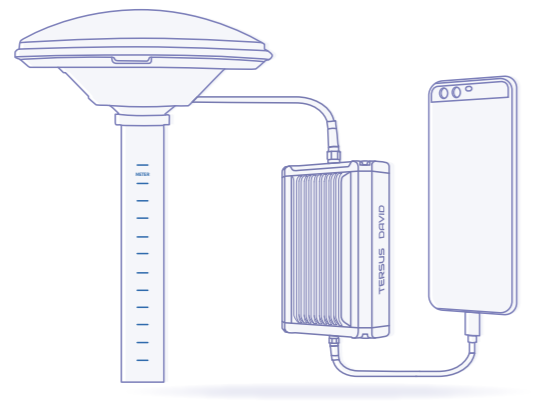
Convenient Connection

- Supports Ntrip protocols for receiving CORS differential data
- Tersus Ntrip Caster service available for the connection of two or more David GNSS receivers

Multi-GNSS (GPS L1/L2, GLONASS G1/G2, BeiDou B1/B2)

- Powered by the Tersus GNSS OEM board, David GNSS receiver provides high-precision positioning performance.

A 4GB in-built memory makes it easy to save data for post processing. The compact size, IP67-rated enclosure and external Bluetooth module alleviates most of the inconveniences encountered in field work.



Tersus David RTK, Paired with Smartphone, Enable CM-level Accuracy.

IP67

- Rugged casing and IP67-rated enclosure to support operations in harsh field environments

Easy-to-use Software & App

- Intuitive software turns any Android phone/pad into an advanced field controller for David GNSS receiver.

David GNSS Receiver - Base & Rover Kits

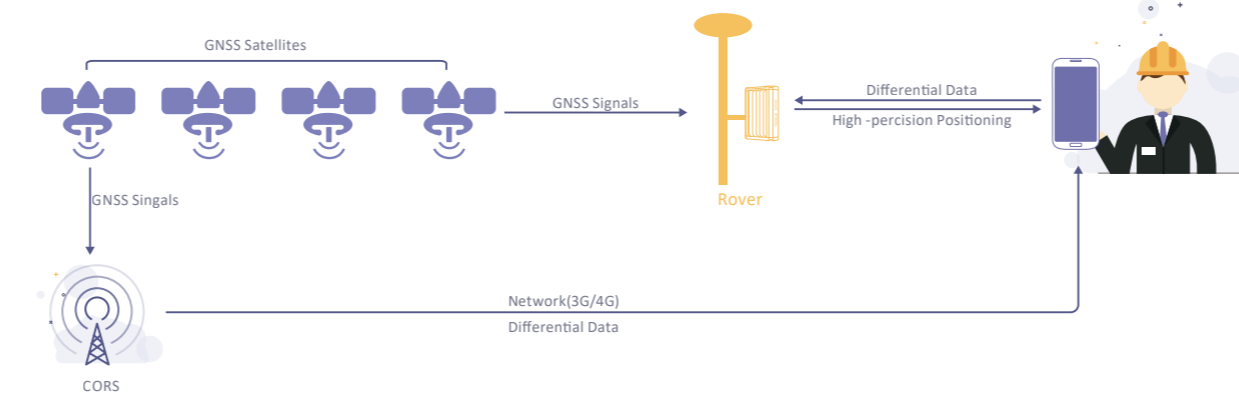
- Rover Kit Mobile Mode
- Rover Kit with 1W Radio Station
- Rover Kit with 2W Radio Station
- Base Kit Mobile Mode
- Base Kit with 1W Radio Station
- Base Kit with 2W Radio Station
- Base Kit with 30W Radio Station

Visit our website www.tersus-gnss.com for more details.

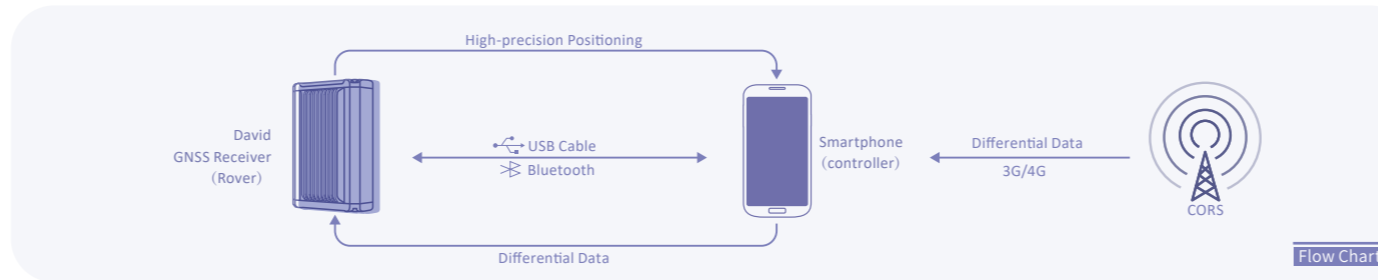


Working Modes

Rover + CORS

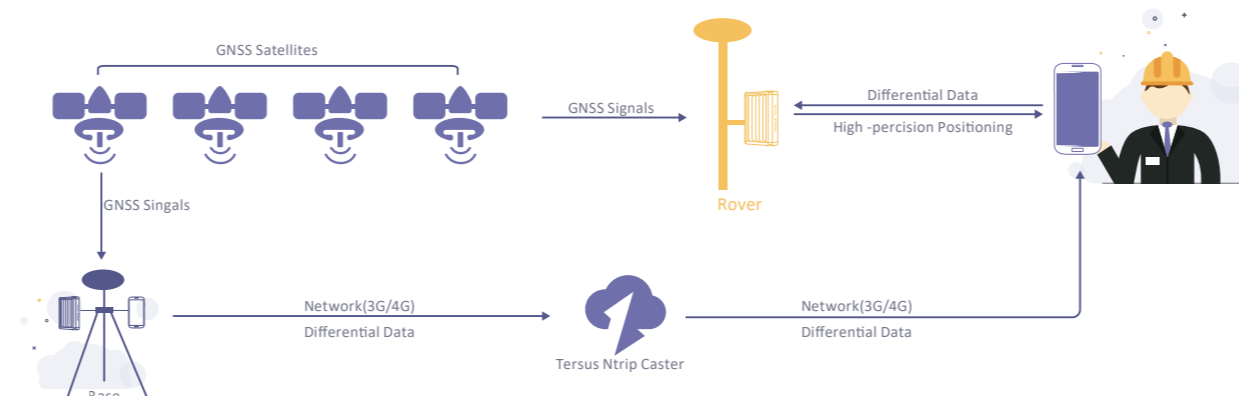


Illustration

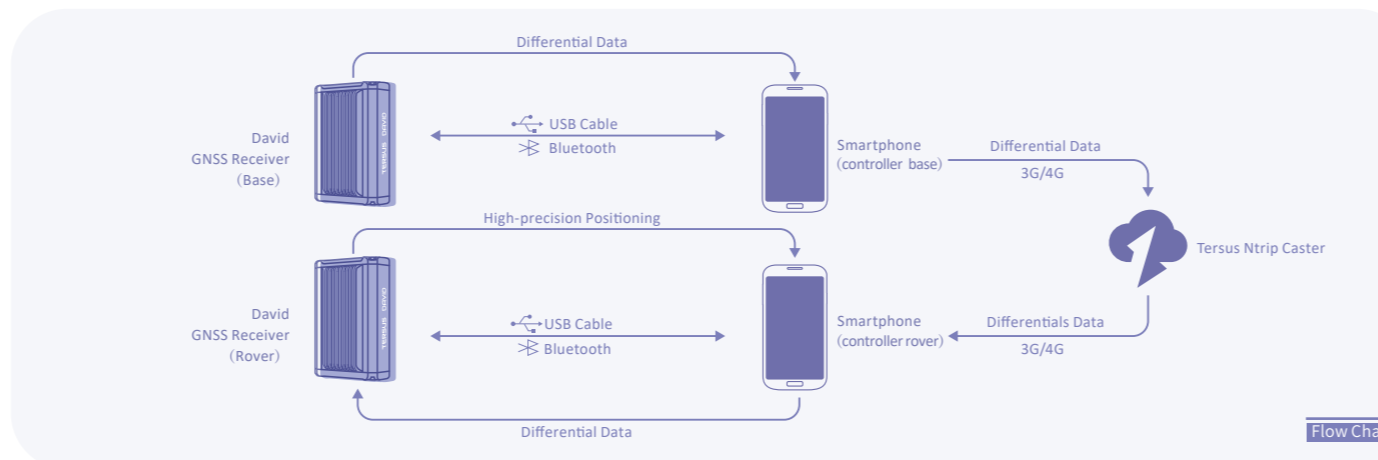


Flow Chart

Base + Rover + Tersus Ntrip Caster

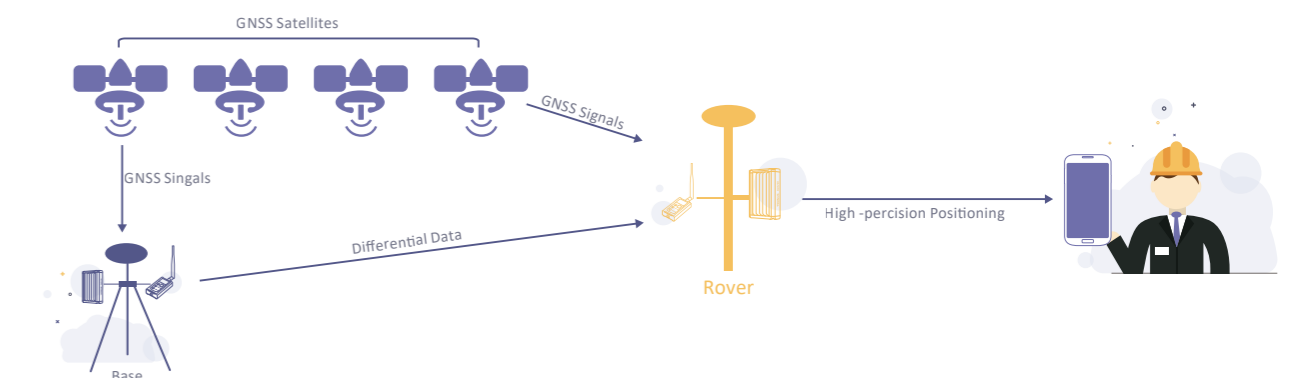


Illustration

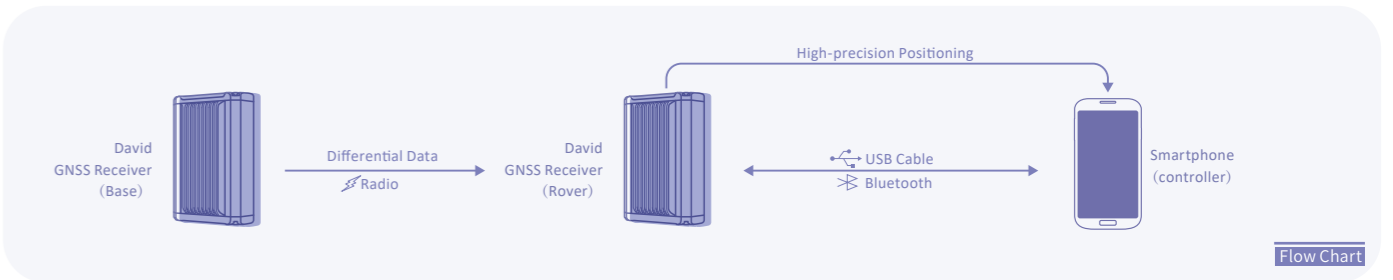


Flow Chart

Base + Rover + Radio

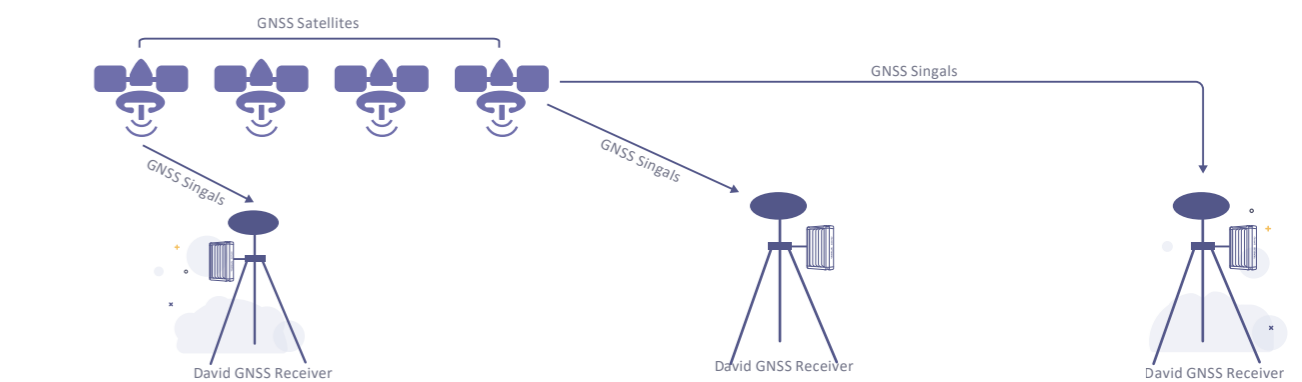


Illustration

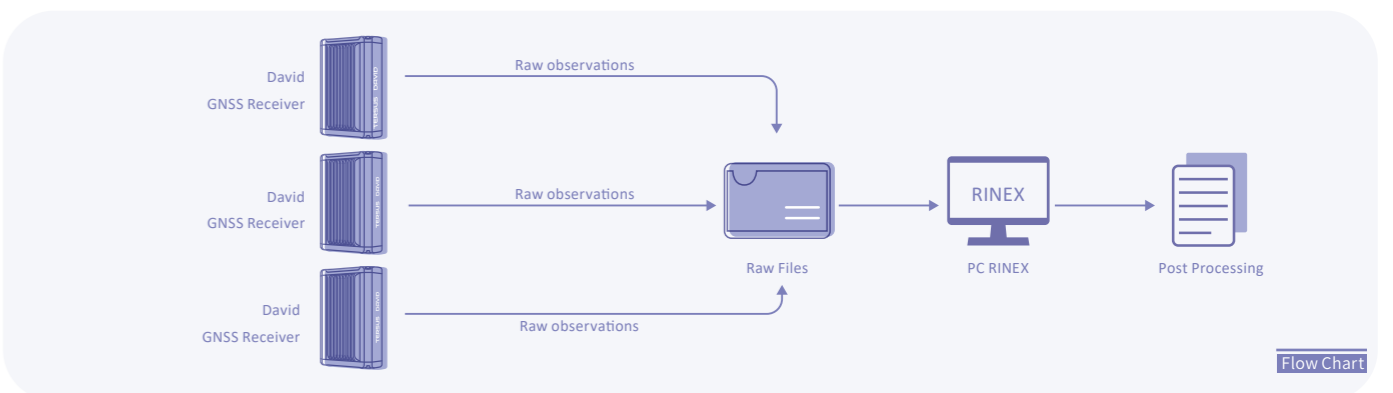


Flow Chart

Static Surveying



Illustration



Flow Chart

Specifications

Signal Tracking	
GNSS	GPS L1/L2 GLONASS G1/G2 BeiDou B1/B2
Positioning	
Single Point Positioning Accuracy (RMS)	
Horizontal	1.5m
Vertical	3.0m
Real Time Kinematic (RTK)	
Horizontal	10mm+1ppm
Vertical	15mm+1ppm
Post Processed Kinematic (RMS)	
Horizontal	10mm+1ppm
Vertical	15mm+1ppm
Static Post Processing (RMS)	
Horizontal	3mm + 0.5ppm
Vertical	5mm + 0.5ppm
Observation (zenith direction)	
C/A Code	10cm
P Code	10cm
Carrier Phase	1mm
Performance	
Time to First Fix	
Cold Start	<50s
Warm Start	<30s
Timing Accuracy (RMS)	20ns
Velocity Accuracy (RMS)	0.03m/s

Initialization (typical)	<10s
Initialization Reliability	>99.9%
Electrical	
Input Voltage	5V ~ 12V DC
Power Consumption	3.2W
Data	
Storage	4GB in-built Memory
Correction	RTCM2.3/3.x, CMR, CMR+
Max. Update Rate	20Hz
Communication	
Serial Ports	TTL x 1 , RS-232 x 1
USB Ports	USB 2.0 device x1
Physical	
Size	104x65x31mm
Weight	250g (David only) 360g (David + BT+PW/USB Cable)
Active Antenna Input Impedance	50Ω
Antenna Connector	SMA female x1
COM Baud Rate	Up to 921600bps
Operating Temperature	-40°C ~ +85°C
Dustproof & Waterproof	IP67
Optional Accessory	
Radio	1W 915MHz 2W 460MHz 30W 460MHz
Battery	Battery bank

Nuwa App

Features

- Supports Bluetooth/USB connection
- Graphical Interface for surveying and stakeout
- Data Management (import/export multiple formats)
- Configures Base, Rover and Static Survey
- Various built-in tools
- Supports background map (online/import)



Tersus GNSS Inc.

Affordable Centimeter Precision for Everyone

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

Our products include GNSS RTK & PPK OEM boards and receivers, as well as integrated solutions such as the David GNSS Receiver, NeoRTK, MatrixRTK, GNSS-aided Inertial Navigation System, and AutoSteer System.

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.tersus-gnss.com
Sales inquiry : sales@tersus-gnss.com
Technical support : support@tersus-gnss.com

TERSUS

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David GNSS Receiver

Base & Rover Kits



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