SPECIFICATIONS

AllyNav

GNSS Performance

Channels	140 8 channels based on Nebulas-IV
GPS	L1C /A/L1C/L2P(Y)/L2C/L5
GLONASS	G1/G2/G3*
Galileo	E1/E5a/E5b/E6*
BeiDou	B1/B2//B3/B1C/B2a/B2b
QZSS	L1/L2/L5

GNSS Accuracies

Real time kinematics(RTK)	Horizontal: 8 mm + 1 ppm RMS Vertical: 15 mm + 1 ppm RMS Initialization time:< 5 s Initialization reliability: > 99.9%
Post -processing static	Horizontal: 2.5 mm + 0.5 ppm RM S Vertical: 5 mm + 0.5 ppm RMS
Positioning rate	Default 1 HZ, Maximum 20 HZ
Time to first fix	Cold start: < 25 s Hot start: < 10 s Signal re-acquisition: < 1 s
RTK tilt - compensated	Tilt angle 0~60°, Tilt accuracy 25mm (within 30° accuracy)

Electrical

Power consumption	5 W (depending on user settings)
Li -ion battery capacity	10000mAh
Operating time on internal battery	20h(Rover) 10h(Base)
External power input	9 V DC to 36 V DC
Power consumption	As Rover<4.0W As Base<10.5W

Communication

Bluetooth	v 4.0, Backward compatible with BT2.x
Ports	1 x 9 PIN aviation plug, including power supply, COM RS232, CONFIGRS232. 1 x UHF radio antenna interface
Build -in UHF radio	Standard Internal Rx/Tx: 410 - 470 MHz/840MHz Transmit Power: 2 W Protocol: CSS，LIANSHI
External Radio	Frequency: 410-470MHz Transmitting power: 35W Working Range: 15-20Km
Data formats	Link rate: 10000 bps to 460800 bps Range: Typical 5 km to 8 km RTCM2.x, RTCM3.x
Data storage	8 GB internal memory

Hardware

Size (L x W x H)	140 mm x 140 mm x 88 mm (5.5 in × 5.5 in × 3.5 in)
Weight	1.03 kg (2.27 lb)
Environment	Operating: -45°C to +75°C (-49°F to +167°F) Storage: -55°C to +85°C (-67°F to +185°F)
Humidity	100% condensation
Ingress protection	IP67 waterproof and dustproof, protected from temporary immersion to depth of 2 m
Shock	Survive a 2-meter pole drop
Tilt sensor	Calibration - free IMU for pole - tilt compensation. Immuneto magnetic disturbances.
Front panel	4 LED indicates 2 physical buttons
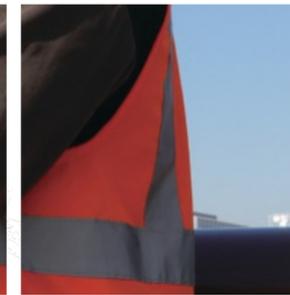
R26
GNSS Receiver

The R26 GNSS receiver removes barriers to portability without sacrificing performance. Featuring full GNSS technology, it offers best-in-class GNSS signal tracking even in a harsh environment, enabling GNSS surveying beyond usual constraints. The R26 GNSS incorporates the latest innovations such as an inertial module providing automatic tilt compensation in a very compact design.

FEATURES

THE POWER OF GNSS+IMU RTK TECHNOLOGY

The precise coordinates can be measured even if the pole body is tilted.
The measuring point efficiency is increased by 20%, and the staking efficiency is increased by 30%.

FULL CONSTELLATION MULTI-BAND

Fully support BDS, GPS, GLONASS, Galileo systems, adapt to a variety of complex and harsh environments, and ensure centimeter-level positioning accuracy.

BUILT-IN UHF RADIO

Built-in low-power transceiver integrated radio module, Adapt to transparent, TRIMTALK, South and so on ,multiple communication protocols.

LARGE CAPACITY AND LONG BATTERY LIFE

Built-in battery with a capacity of up to 10000mAh, which can achieve more than 14 hours of continuous battery life.

TWO OPERATING MODES INTERCHANGE

Base station mode and rover mode can be switched freely according to needs which can realize automatic switching between mobile station and base station.

ALL-IN-ONE DESIGN

Built-in Bluetooth, radio, storage, positioning, inertial navigation, antenna and other modules to meet various needs of measurement work.

SURVEY SOFTWARE

ALLYPAD FLAGSHIP SOFTWARE

LP80 ANDROID CONTROLLER

High-definition large screen, clear display 5-inch IPS high-brightness screen, the measurement base map display is more comprehensive and intuitive, even under the sun it is visible

High-end configuration, no longer stuck

Octa-core processor, Android 8, the system is smooth and works without interruption

Lightweight and compact, easy to work

The thickness of the handbook is 2cm, the weight is 360g, and it supports custom measurement shortcut keys, making fieldwork more efficient

LP80 Android Controller

AllyPad interface