

DATASHEET



**SurveyGear**

**R10**

GNSS Receiver



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# Specifications

## Signal Tracking

BDS: B1I, B2I, B3I, B1C, B2a, B2b

GPS: L1C/A, L1C, L2C, L2P(Y), L5

GLONASS: G1, G2, G3

Galileo: E1, E5a, E5b, E6

QZSS: L1C/A, L1C, L2C, L5

NavIC: L5

SBAS: L1C/A

Time of cold start: < 12s

Initialization time: < 5s (typical value)

RTK initialization reliability: > 99.9%

Recapture: < 1s

Correction Formats: RTCM 3.X

## Precision Indicators

Single point positioning:

Horizontal: 1.5m

Vertical: 2m

RTK accuracy:

Horizontal:  $\pm 10\text{mm} + 1\text{ppm RMS}$

Vertical:  $\pm 20\text{mm} + 1\text{ppm RMS}$

Inertial navigation measurement:

Inclination:  $0\sim 60^\circ$

Inclination accuracy: 2.5 cm (within  $30^\circ$  accuracy)

## Electrical Parameters

Battery life:  $\geq 16\text{h}$

Input voltage: DC  $5\text{V} \leq 1\text{A}$

Battery capacity: 4800 mAh

Power consumption: 1W

## Physical Performance

Operating temperature:  $-45^\circ\text{C}$  to  $+75^\circ\text{C}$

Storage temperature:  $-55^\circ\text{C}$  to  $+85^\circ\text{C}$

Physical dimensions:  $\Phi 165 \times 70\text{mm}$

Ingress protection rating: IP54

Impact and vibration: Resistant to 2m drops

Button(s): 1 button

Indicators: 2 LED indicators

Weight: 0.55kg

## Data Interfaces:

Data refresh rate: 1Hz

Baud rate: 115200

Interface mode: Standard TYPE-C interface

Bluetooth: BT4.0

## Data Output

Positioning data: NMEA-0183



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