System Parameters

Weight	1.7kg	**Interfaces**	USB 3.1 Gen2
Size [1]	180mm×130mm×400mm	**Storage**	1T SSD
Outer Casing	Industrial-grade Aluminium	**Continuous Operation Time**	1.5h
Power Consumption	<30W	**Wireless**	Supports WiFi, Bluetooth : 802.11a/b/g/n/ac, 2.4~2.4835GHz and 5.15~5.85GHz

Environment

Operating Temperature	-20°C~50°C -4°F - 122°F	**IP Rating**	IP54

Functions

Visual Positioning	Supported	**Real-time RTK Fusion**	Supported
Real-time RGB	Supported		

Output

Point Cloud Formats	.las .ply	**Image Formats**	.jpg

Real-time Accuracy

Absolute Vertical Accuracy (RMSE) [2]	3cm	**Relativet Accuracy (RMSE)** [3]	2cm
AbsoluteHorizontal Accuracy (RMSE) [2]	3cm		

Processed Accuracy

Absolute Vertical Accuracy (RMSE) [4]	3cm	**Point Cloud Thickness** [6]	0.5cm
Absolute Horizontal Accuracy [4]	3cm	**Horizontality (with RTK)** [6]	0.015°
Relative Accuracy(RMSE) [5]	1cm	**Verticality**	0.03°
Repeat Accuracy(RMSE) [5]	2cm	**LixelUpSample**	Supported

LiDAR

Operating Range	0.5m~120m 0.5m~300m	**Scanning Frequency**	320,000 points/s 640,000 points/s
LiDAR Sensor	Class 1 / 905nm	**Sensor FOV**	360°×270°

Camera for Panoramic Images

Resolution	2×48MP	**CMOS**	1/2"
Focal Length	2mm	**Shutter**	Rolling shutter
Aperture	F/2.0	**FOV**	190°×190°

Camera for Visual Positioning

Resolution	1×1MP	**FOV**	190°×119°
Shutter	Global shutter		

Battery

Voltage	14.4V	**Capacity**	46.8wh

Charging

Input	100V~240V 50 ~ 60 HZ 1.5A 80VA	**Power Rating**	34W
Output	16.8V 2.0A		

Accesorries and RTK

Backpack with Stabilizing Arm	Dimensions:60cm×60c×15cm Weight: 2.5KG	**Backpack with Padding**	Dimensions:55cm×35cm×25cm Weight: 2.7KG
Standard RTK [7]	Supported Channels: GPS L1/L2/L5 GLONASS L1/L2 BDS B1/B2/B3 Galileo E1/E5a/E5b/E6b Accuracy: Horizontal: 0.8 cm+1 ppm Vertical: 1.5 cm+1 ppm	**Survey Grade RTK** [7]	Supported Channels: GPS L1/L2/L5 GLONASS L1/L2 BDS B1/B2/B3 Galileo E1/E5a/E5b/E6b Accuracy: Horizontal: 0.8 cm+1 ppm Vertical: 1.5 cm+1 ppm
2m Extension Pole	Supported	**Mobile Phone Mount**	Supported
Control Point Plate	Supported	**Shipping case**	Dimension: 42cm*34cm*18cm Weight with System: 6.6kg

[1]Includes battery and base, excludes other accessories.
[2]RTK disconnection <100m.
[3]Distance between two points is less than 100m.
[4]GCP/RTK disconnection <100m.
[5]Two RTK-enabled scans without disconnection.
[6]Point cloud thickness within 10m of the walking path.
[7] The test results may be affected by atmospheric conditions, baseline length, GNSS antenna type, multipath effects, the number of visible satellites, and satellite geometry, which could cause deviations. The measurement was conducted using a 1km baseline and receivers with good antenna performance, without accounting for potential antenna phase center offset errors.