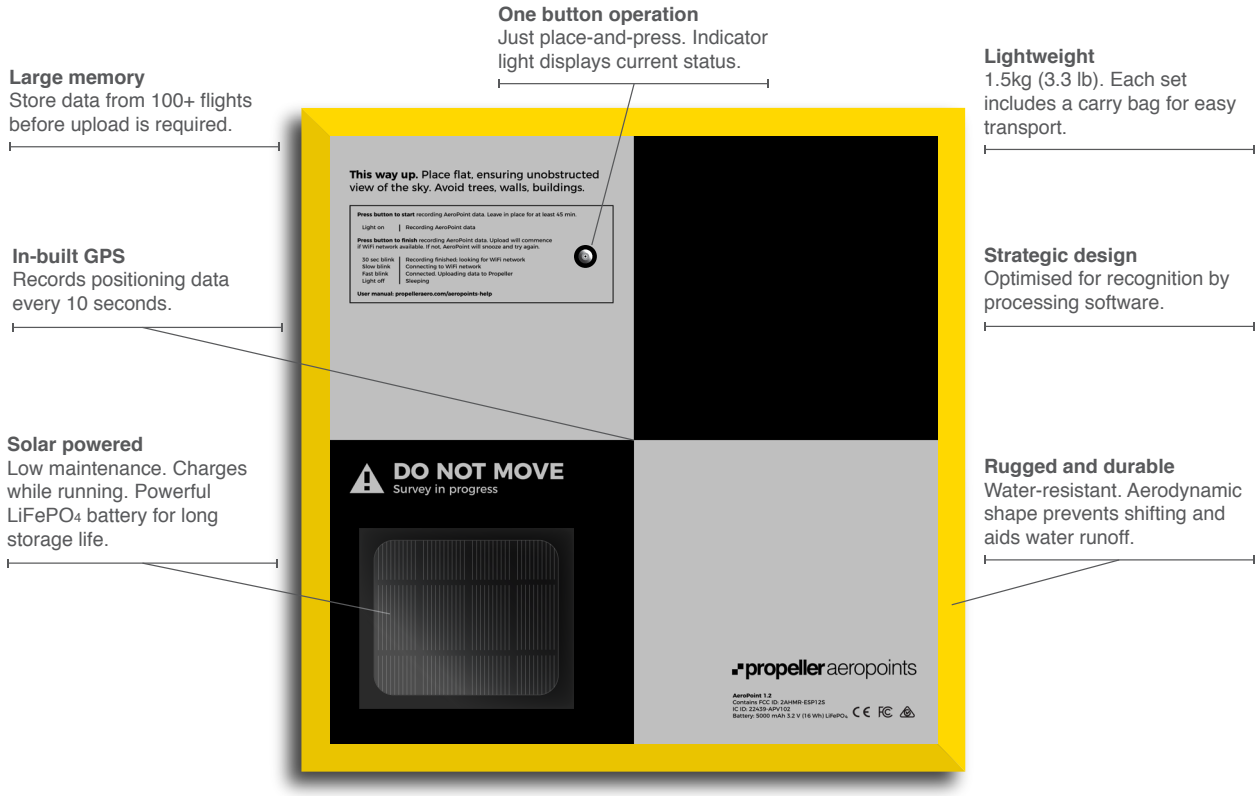
propeller aeropoints

CaronEastInc.

Technical Specifications

To ensure your commercial drone operation delivers consistent, high-quality data, you need to get ground control right. AeroPoints are the world's only ground control solution purpose-built for drone operations—making accurate data simple and affordable.

Each AeroPoint is a portable, reusable ground control point (GCP) that repeatedly records positioning data while you fly. Lightweight and durable with simple one-touch operation, a standard set of 10 AeroPoints can be placed around a survey area in minutes.



	Global accuracy	Relative accuracy
Propeller Correction Network (within 35km baseline, see coverage map)	Horizontal: 10mm + 1ppm Vertical: 20mm + 1ppm	Horizontal: <10mm Vertical: <10mm
L1/L2 RTK Rover/Base Station RINEX	Horizontal: 10mm + 1ppm[1] Vertical: 20mm + 1ppm[1]	Horizontal: <10mm Vertical: <10mm
AeroPoint on known mark	As accurate as the known mark	Horizontal: <10mm Vertical: <10mm
No correction	Horizontal: 500mm Vertical: 500mm	Horizontal: <10mm Vertical: <10mm

[1] Where RINEX or known mark data is supplied to correct AeroPoints, results will be dependant on accuracy of the supplied data.

Incredible accuracy in less than an hour

AeroPoints only need to be activated for 45 minutes for the in-built GPS to record accurate data—well within typical drone operation time. AeroPoints work collaboratively to correct against each other, so the accuracy of each unit increases when more AeroPoints are activated. We recommend using all 10 AeroPoints for every survey, no matter how small.

Flexible post-processing correction

AeroPoints work anywhere in the world, even if not in range of our extensive and constantly expanding Propeller Correction Network.

AeroPoints will correct against each other to achieve tight relative accuracy—or you can achieve global accuracy using your own base station's RINEX data, taking a single GPS rover shot from the centre of one AeroPoint, or laying an AeroPoint on top of a known mark.

Works with your grid

If you use a non-standard or local grid coordinate system, simply provide us with a Point Pair file that translates your grid to a coordinate reference system.

Works with any drone

AeroPoints improve the accuracy of data captured by any GPS-enabled drone, even those with onboard RTK. As good as RTK is, AeroPoints provide a stable 'on the ground truth' that helps correct the impact of altitude variance and temporary signal loss.

Works with any software

We recommend using AeroPoints together with the Propeller Platform. Full integration provides a seamless workflow for processing and visualising accurate drone data. However, if you prefer to do your own processing, you can easily export the processed position data for use with any software.

Compatible drone technology	Any GPS (including RTK) enabled drone, including DJI (Phantom, Matrice, etc)
Compatible correction data	Propeller Correction Network; On-site base station (RINEX); Known mark
Compatible image/sensor types	RGB only
Software compatibility	Any processing application that accepts GCP data in CSV format
Battery life	45 hours (with no sun exposure)
Charging time	16 hours in full sun
Operating temperature	-10°C/14°F to 50°C/122°F (ambient)
Operating humidity	100% (condensing)
Regulatory certifications	FCC, IC, CE, RCM
Processed data formats	View in Propeller Platform, or download as CSV, PDF, KML

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