Trimble Stratus

PROPELLER PPK AERIAL MAPPING SOLUTION

Get consistent results, quantifiable savings, and the confidence you need to map, measure, and manage your worksite with the high-precision Propeller PPK solution. A fully integrated system using a DJI Phantom 4 RTK drone for collecting highly accurate worksite survey data – without the hassle and complications of traditional workflows.

Post Processing Kinematic (PPK) is not a different type of hardware, but rather a different *processing workflow* using an RTK-enabled drone. The difference is how the data from a base station is processed for correction and accuracy. RTK-enabled drones have a high-precision GNSS receiver which gives it the ability to track their own positions accurately in the air — a feature regular drones lack.

When using a Real-Time Kinematic (RTK) workflow, the drone relies on a passive base station to send raw GPS data to the drone, and using that info and it's own GPS to accurately determine its position relative to the base.

With PPK, the drone geotags each image with high-precision coodinates, provided by the on-board GPS unit. While this is happening, an AeroPoint is actively recording its positional data, which will be used as the base for the PPK processing.

After the flight is completed, those two sets of GPS data are processed to produce a precise trajectory for the drone — thanks to the photo's timestamps which allow the photo center to be determined from the trajectory. Knowing the offset after the fact lets us rewrite the initial, less-than-accurate on board GPS data, giving precise geotags for the drone's imagery.

See How They Stack Up

RTK WORKFLOW

- Requires stable radio link to receive base station data, which is processed during flight
- Correction data and initialization loss results can reduce percentages of accurate camera positions, which is necessary for site survey rendering

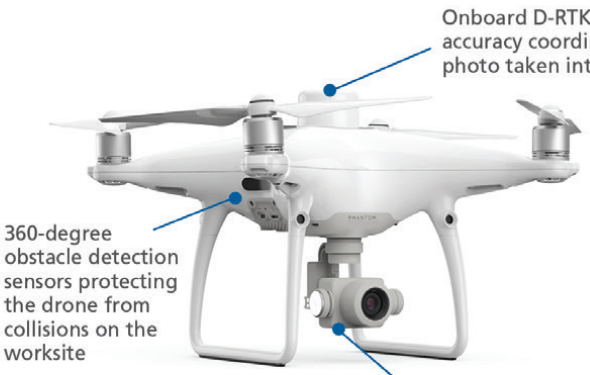
PPK WORKFLOW

- No data or initialization loss by signal link limitations, as with RTK technology
- All captured data processed with similar algorithms to RTK, run back and forth through the data
- Overall, ensures the most reliable results possible

DATASHEET

Trimble Stratus PROPELLER PPK AERIAL MAPPING SOLUTION

INTRODUCING THE DJI P4R PPK



WHAT'S IN THE BOX?

- 1x - DJI P4R PPK Aircraft Body
- 1x - Remote Controller
- 4x - Propeller Pair
- 2x - Intelligent Flight Battery
- 1x - Remote Controller Intelligent Battery
- 1x - Intelligent Flight Battery Charging Hub
- 1x - Intelligent Battery Charging Hub
- 1x - AC Power Cable
- 1x - AC Power Adapter
- 1x - Gimbal Clamp
- 1x - MicroSD Card (16GB)
- 1x - Carrying Case
- 1x - Micro USB Cable
- 1x - USB-C Cable
- 1x - USB-C OTH Cable
- 1x - Aeropoint
- 1x - DJI Shield Protection Plan

WE HAVE YOU COVERED!

All DJI P4R PPK drones include DJI Shield Plan. Accidently crash your drone? No problem. DJI will replace your drone up to two times within the first year for a discounted cost of $500.

ANNUAL CORRECTIONS DATA

Every DJI P4R PPK drone purchased with the Stratus Platform includes one year of free correction data.

Not a Stratus user? Not a problem! Annual correction data is available for purchase.

AEROPOINTS

These smart ground control points have built-in GPS that capture incredibly accurate positional data. They work with any drone or camera system, and remove the need to buy or rent expensive GPS equipment. Simply lay them out, fly your drone, and then pick them up.

SITECH™

888-4-A-LASER

SITECH NorCal
833 Montague Ave.
San Leandro, CA 94577
www.SITECHnorcal.com

TRIMBLE AGGREGATES DIVISION OFFICE
45 Patiki Road, Avondale, Auckland 1026
PO Box 19623, Avondale, Auckland 1746
New Zealand
Tel: +64 9 820 7720
Fax: +64 9 820 7721
aggregates@trimble.com
www.aggregates.trimble.com