

Why is DJI's Phantom 4 RTK the Drone of the Future?

DJI's Phantom drone series has been the workhorse of the construction, aggregates, and waste management industries for years. The most recent [release is the Phantom 4 RTK](#) drone, which is DJI's first survey-focused UAV.

Those familiar with its predecessor, the Phantom 4 Pro, will see only one difference in how it looks. The RTK hardware is housed in short cylinder on top of the drone. It's this piece that sets the Phantom 4 RTK above the rest.



Onboard RTK technology means greater and reliable accuracy

Having a real-time kinematic (RTK) unit on the drone itself allows its photos to be geotagged to survey-grade accuracy. This, plus corrections from a base station on the ground, means unprecedented reliable accuracy for your drone surveys.

Take, for example, the [Propeller PPK](#) solution. You use a single [AeroPoint](#) as a base station while flying your drone. When your data is processed after the fact, you get [1/10ft accuracy](#)—or better—site-wide.

How onboard RTK affects ground control

With traditional drone surveying, you need to establish proper ground control to get accurate results. This can introduce a lot of ways to accidentally mess things up, especially if you're new to drone surveying.

Take, for example, the traditional workflow using 10 AeroPoints and a Phantom 4 Pro. [Distributing your ground control correctly](#) can be hard if you've never done it before. But you need to establish ground control to get an accurate survey, and that means placing the AeroPoints around the perimeter and interior of your site. Then you need to fly the site and capture high-quality photos.



Once you have the process down, it's a great workflow. Many people happily survey this way every week. But, if you're just starting out in the drone surveying world, the RTK is likely the best option for you.

Time savings for PPK workflow with Phantom 4 RTK drone

But as you can imagine there are some drawbacks. Large sites are a big one when it comes to the traditional workflow. If you have a very large site, you'll have to lay out more than 10 ground control points or else split your site and fly it twice—or more. All doable, but it is time-consuming.

With the Phantom 4 RTK in Propeller's PPK workflow, you only need one AeroPoint to start. Simply place it, then fly your drone. All customers who've switched to the PPK solution have saved hours off an already reduced workflow.

But saving time is just one of the many ways Propeller PPK and the Phantom 4 RTK improve your surveys. The other is data quality.



DJI Phantom 4 RTK drone on site

Phantom 4 Pro vs. Phantom 4 RTK data

Even the best drone pilots have bad days and bad data. Sometimes it's as simple as the weather, other times its a bigger issue like improper ground control setup.

But data captured with a Phantom 4 RTK in a workflow like Propeller PPK is consistently better. This is because the Phantom 4 RTK has the ability to geotag its photos with survey-grade accuracy. It essentially turns every photo into a ground control point, making every photo more precise. All with less effort from you.

DJI to stop producing the Phantom 4 Pro

Aside from all the accuracy and workflow benefits you get from the Phantom 4 RTK, there is another big reason to start thinking about switching up your drone.

DJI announced earlier this year that they're stopping production of the Phantom 4 Pro.

As we've seen, each drone does its job well. Whether or not you are looking to use a new workflow or a different drone, be aware that the Phantom 4 Pro won't be around forever. So if you're looking to update your existing drone or are just starting out, the Phantom 4 RTK is a great option.

But know, that like most technology, drones are ever-evolving. This one won't be the gold standard forever. In the future, other drones will get even tighter accuracy. But if you want the best today, check out the Phantom 4 RTK.

Interested in using a Phantom 4 RTK on your worksite? [Contact us today](#) to see how you can 1/10ft (3cm) accuracy with Propeller PPK.

You might also like:

[How Propeller PPK Streamlines AeroPoint-based Drone Surveying](#)

[What is Ground Sample Distance \(GSD\) and How Does it Affect Your Drone Data?](#)

[What Goes Into The Average Drone Surveying Workflow?](#)