

Arm your surveyers with the

right

Today's surveying is evolving, with the need to work smarter in order to compete. Just as chains and compasses gave way to early theodolites, necessity has proven the mother of invention with advancements into total stations, GPS and robotics — raising the bar on speed and precision. But geospatial professionals must also be prepared with tools that ensure success—no matter what challenge lurks around the corner.

By leveraging innovative technology, surveying companies in turn are able to achieve new levels of productivity, elevating their reputations as capable experts who can capture reliable data anytime, anywhere — within tight timelines. Today, that door opens by having the latest GPS-enabled tools ready for challenges that require capabilities even beyond gold-standard options like RTN-service or RTK methods.

True leaders blaze trails...

1990

2011

2024

Trimble introduces the very first robotic total station.

The launch of game-changing Trimble RTX[®] eliminates the need for a base station, taking positioning solutions for geospatial, agriculture and construction to a new level.

Trimble merges premium engineering and market leading positioning with CenterPoint[®] RTX built right into receivers a match made for performance.

When accuracy and simplicity are

AS THE AND THE REPART







Does your technology enablement partner push the boundaries of where surveyors can go?

Does it provide solutions that open doors to locations that were once off-limits due to the impracticality of traditional equipment?

Does it allow operators to venture into untamed wilderness, sprawling urban developments, or vast fields armed only with tools you can carry in one hand?

Do their patented innovations widen the scope of potential projects and a new level of versatility?

Do they arm your teams with greater ability and confidence that *can in turn enhance your reputation?*

Leverage our tools and do more with less.



"Having used CenterPoint RTX before, we were confident it would be good. We didn't know it was going to be *that* good."



What got them from point A to point B faster, and without complications?

FIND OUT...

Accuracy is pivotal to a myriad of projects requiring meticulous measurements wherever precise boundary delineations are required. Innovations in accuracy not only bolster the reliability of your surveys but also instill newfound confidence in the data you present to clients.

But conditions aren't always ripe for popular modalities to do the job. Accuracy must be achievable even amid the most massive and complex projects. That's what one river engineering crew faced when looking for a solution to gauge critical data along the 342-mile Colorado River without needing to make pit stops to place or move base stations. Workflow and time constraints demanded a smarter solution, and crew could not risk any signal interruption.











The ability to venture into previously inaccessible terrains opens up a realm of possibilities, allowing surveyors to tackle more projects in diverse environments. But time is money, so minimizing the time spent on data collection and validation must be part of the equation.





"Despite the high latitudes at which this test occurred, the reliability of the correction service over the L-band was remarkably consistent. We were shocked the CenterPoint RTX correction service kept working as far north as it did."

By harnessing the precision of satellite corrections, projects move forward at an accelerated pace, with every measurement instilled with confidence. Embarking on an extensive ocean-mapping expedition to the Canadian Arctic, one research team needed a robust, dependable and consistently precise system in the harshest of conditions. In the end, they were collectively "shocked" at how their solution kept working as far north as it did.

What worked for them to get the accurate data they needed?

Dynamic solutions for CULTURE MONT

Overcoming Challenges

It's not just where a job is that can create challenges; sometimes it's the lay of the land, which was what a team at Cape Survey Ltd encountered while providing essential services for a new wind farm. While RTK provided excellent accuracy, its range was limited by rolling terrain, which blocked out radio signals, and regulations on radio output power further reduced performance. Having to create new control points and move base stations frequently would take too much time.

Today's jobs call for real-time satellite corrections that ensure both precision—even when line of sight is impeded. And sometimes there's no room for stops and restarts, uncertainty or re-measuring.

How did this team overcame challenges, exceededing even their own expectations?

"The main thing is time and cost savings and the consistent availability of the signals. Field time is cut dramatically and we can use smaller crews."

wind turbines powering

120,000 homes

How did they turn three-day jobs into one?

How did they overcome radio signal challenges while also getting the job done quickly and controlling labor costs?

And how did they mitigate the need for so many stops and restarts to set and move base stations?

Work smarter, not harder — with better tools.

Minimize risk,

maximize results

Workflow efficiency was key here, and so was crew safety.

Environments don't get much more extreme than volcanic areas, and when a team of researchers in Italy needed to analyze the movement of magma in one of the world's most active volcanoes, things got complex. Despite the availability of geodetic control points, inconsistent cellular service made connection to Italy's real-time GNSS network difficult, and constraints on radio licensing ruled out conventional RTK.

The solution must be quick, negating unnecessary downtime inhibiting progress toward data validation. In this case, there was a better option—one that enabled an uninterrupted pace allowing crews to get in and get out ASAP, minimizing their risk in a hazardous environment.

How did they tame both the physicality and the risk without sacrificing reliable data here?

Success begets **SUCCESS**

Today, the bar has been raised, and surveyors are expected to be ready for anything.

When traversing difficult terrain is necessary, hardware failures and connectivity issues are a real concern. This reality prompted a senior operations manager at WGI to try something outside their toolbox. Just one trial day was all it took to realize the benefits of not needing to worry about base stations, unstable internet connections or equipment failures.

What was their game-changing approach here?

Arming teams with the tools that allow them to see around corners and adjust on the fly empowers them to turn complex situations into feasible tasks.

What if I lose radio signal or internet connection during the job?

What if going back to set up base station for a few missed points *is not feasible?*

What if load of carting base stations around is creating too high of a labor cost?

What if I encounter gear problems, base failures or a dead RTK battery?

What if terrain obstructions impede progress?

Mitigate these concerns with one toolbox addition...

Challenges do not need to sideline 0r02ress

Real-life scenarios like the ones outlined become non-issues if you have the right tools on hand to pick up the slack, taking the "what if" worries out of the equation.

SPOILER ALERT...HERE'S HOW THEY DID IT!

The time to realize you need an additional tool is not after your project stalls. Experience the peace of mind that comes with knowing that CenterPoint RTX is built right in, available whenever you need it, at no added cost — for an entire year.

With Trimble CenterPoint RTX

the only limit is how far you're willing to go.

Trimble CenterPoint RTX rounds out your surveying toolbox with everything needed to get the job done, no matter what challenges arise. With both and VRS/RTK on board, productivity stays on track. Use traditional RTK methods when it's feasible, and CenterPoint RTX when it's not and achieve:

- Centimeter-level accuracy
- Accelerated operations
- Enahanced productivity
- Positioning insurance
- Fast convergence
- Worldwide availability
- Full constellation tracking
- Independance from base stations
- Untethered surveying
- RTK interoperability

Learn how you can put CenterPoint RTX to the test: rtx.trimble.com

