

WITH THE PUSH OF A BUTTON

RAPID DEPLOYMENT

Tower Solutions' Rapid Deployment Saves Lives

A natural disaster just hit your area. The cell towers are down, people are missing, and there is no immediate disaster relief. It could take weeks until the cellular connection is repaired. You need a way to quickly elevate equipment and respond.

Or you are in enemy territory. You need to surveil the area for threats, without being found yourself. Tower Solutions tower products' **rapid deployment is the solution**.

The US military and foreign militaries worldwide rely on Tower Solutions tower products for their Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR). Emergency response organizations utilize our towers for Mitigation, Preparedness, Response, and Recovery.

Customers choose our towers for their high-risk applications because Tower Solutions towers are designed to meet military requirements for setup and deployment times, along with meeting requirements for stability, lifting capacity, height, and durability. At Tower Solutions we know that every moment on the front lines is crucial.









How fast are Tower Solutions towers? Our small tower series masts, designed for compactness and mobility, can deploy up to 650 lb. to a height of **30 ft in just 2 minutes**. The large tower series module can lift 2,000 lb. to a height of **120ft in under 8 minutes**. Our tower deployment times cannot be beaten.

And not just our towers are fast. The outriggers found on our largest tower, the <u>PTX-100/200</u>, are also quick to assemble, as well as our optional cable management systems with spring-powered automatic reels.

What Features Enable Such Rapid Deployment?

Push a button and raise your equipment in less than ten minutes. Our patented, self-erecting technology enables such rapid deployment. When a Tower Solutions mast is deployed, an individual section is pulled off each of the three chains of reeled-up tower at the tower's base, spinning them. During this rotation, hooks between each section link to hooks on their neighbor chain, locking the three sides of the mast together into a rigid triangular column. The electromechanical mechanism accomplishes all of this on its own, allowing you to control the tower with just a button and a single motor and gear system in the mast center. There is no tipping or tilting of long mast sections and no manual locks to prevent collapse if a cable breaks. All of which cut deployment time down significantly.

With the mast design, you can run the motor at high speeds and the mast is more stable because the weight of your equipment bears down on the interlocking column. Overall, the setup is quicker because:

- The mechanism is inherently fast because of its direct drive design.
- The increased stability from a constant width tower all the way up eliminates the need for attaching guy wires and locking pins.
- The vertical orientation eliminates the time needed for others to tilt up the mast from its transport position and makes maintenance and deployment straightforward.
- The mast can be stopped and operated at any point by letting go of the button.

If you want the quickest setup possible, we manufacture our <u>Small Tower Series towers</u> to mount in truck beds or ATVs for mobile deployment. Deploy your payload from its secure cradle, level the tower, lift your tower, and operate equipment in **two minutes or less**, all from the seat of your vehicle. Then lower your equipment, stow it, and drive off without a trace.

Get In, Get Out, Save Lives

What are the benefits of rapid deployment? The answer depends on the application. Here are three examples

On the Front Lines

For one, our rapid deployment towers help protect the lives of US Marines. Steve Kensinger, the Chief Technology Officer at Tower Solutions, often shares a story about a Marine he met in 2015. Years prior, Tower Solutions had built 15 towers for the US military for a classified scanning operation in Afghanistan. Upon the request of the US Marines, we reduced our deployment times from 5 minutes to 2.5 minutes for this operation.



Steve Kensinger was running the Tower Solution booth at Eurosatory, the largest military show in Paris. "On the last day of the show, Marines from Afghanistan were passing through on their way back home. The day was wrapping up, and the show was emptying out. Suddenly, a big Marine comes barreling down the aisles. He points at my booth yelling, 'I know you!' I couldn't help but think, 'this can't be good,"' Steve Kensinger recalls.

The Marine introduced himself and told Steve he was a Crew Chief in Afghanistan. He said he loved our towers because they helped save his life. He spent time in hostile territory and often stopped to surveil areas. In hostile territory, anything above around 80 feet was targeted by the enemy. Rockets and mortars would be fired upon the location within 15 minutes. Speed was paramount.

The Marine explained to Steve that his team trained extensively with Tower Solutions towers. They could reach the site, deploy the outriggers, lift the tower, and do a full scan in 9 minutes flat. Marines still have a march time of 15 minutes while in hostile territory, meaning they have 15 minutes to leave the area if they are targeted. Rapid deployment helps save lives in this application.

In an Emergency

Tower Solutions portable towers also save lives in natural disasters and emergency response.

One group in the Southern US utilizes our towers for emergency management every spring when the Ohio River floods. If someone goes missing in the river, our tower products enable them to quickly lift infrared cameras, spotlights, and communication equipment to locate and rescue the missing person. During flood season, crews and equipment are ready 24 hours a day to relocate and respond to emergencies.

When Comms are Down

Lastly, Tower Solutions towers were used after Hurricane Katrina in New Orleans. Within two hours, towers were strategically located to restore cell and emergency communication services. Communication is key to saving lives and organizing response efforts in a disaster.

Maybe your tower application is not life-threatening. Besides the military and emergency response, rapid deployment is still of massive benefit to you. Get your payload up quicker and **save on labor, travel, and time** with rapid deployment. A crew doesn't need to spend a day on setup.



Rapid Deployment: Saving Time, Labor, and Lives

Our towers are packed full of tower engineering solutions to expedite deployment and retraction, and they are extremely strong to increase their reliability. Most towers buckle under 2000 lb. of equipment. Our towers will not buckle but become more stable with the added weight as it bears down on the single-column mast. The added weight will also accelerate the descent.

The unequaled stability of the mast and the simple, self-erecting technology together make a rapid deployment tower like no other on the market. Save time and money by deploying and relocating your equipment more quickly with Tower Solutions.



Want to learn more about how our tower products are used in the military and disaster management? <u>Visit our applications page.</u>

Or contact us today to schedule a consultation for your customized, rapid deployment tower.