

What is a Tethered Drone?

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About Tethered Drone

- A tethered drone is an **unmanned aerial vehicle tethered to the ground**.
- It **consists of a base station on the ground and the drone**, which is **connected to the station through the tether (cable)**.
- This **tether provides power and data communication** to the drone, **allowing it to operate for extended periods** without the limitations of a finite onboard battery.
- The **drone can be operated remotely** to perform specific tasks.
- **Advantages:**
 - Tethered UAVs are **perfect for data capture and telemetry due to the reliability of tethered connections**.
 - They dramatically **reduce technical and human error crashes** in flight.
 - They **provide a secure line of communication** between the ground station and the aircraft.
 - The **physical connection to the ground makes tethered drones less vulnerable to interference or hacking** compared to wireless drones.
 - It also **does not require GPS navigation**.

- Many tethered drones **have longer flight times compared to free-flying, battery-operated drones.**
 - Due to the restricted movement of a tethered drone, the **operator does not need piloting skills and can mainly focus on their tasks.**
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Q1) What is GPS?

The Global Positioning System (GPS) is a space-based satellite navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellite. The Global Positioning System (GPS) is a space-based satellite navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellite. It is made up of a network of 24 satellites placed into orbit by the U.S. Department of Defense. GPS was originally intended for military applications, but in the 1980s, the government made the system available for civilian use.

Source: [Army signs deals for 130 tethered drones and 19 tank driving simulators](#)

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