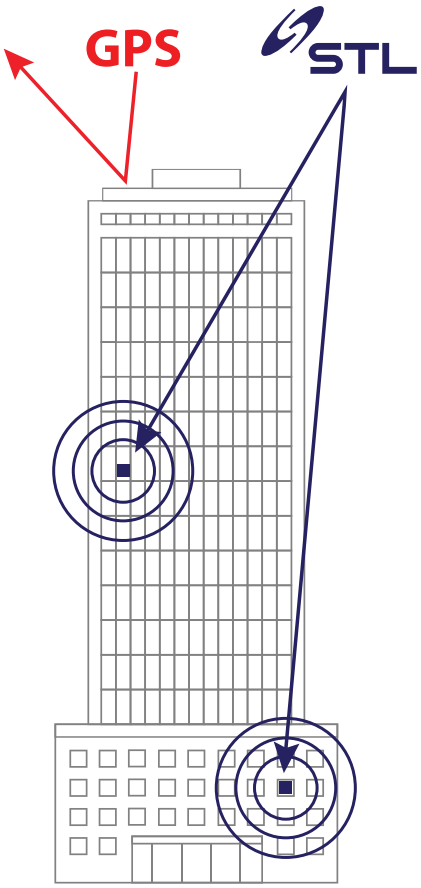
STL™

# Timing Alternative to GPS

## STL™ from Satelles® is a primary source of time for 5G deployments — and it works indoors, too.

The Global Positioning System (GPS) and other Global Navigation Satellite Systems (GNSS) are vulnerable to disruption and manipulation, and they typically require an outdoor antenna when used in 5G networks — along with the cost and hassle of installation and cabling.

Satelles®




## STL (Satellite Time and Location) from Satelles is an alternative to GPS/GNSS that is more secure against hacking and uses only a small indoor antenna.

- STL is an innovative service that provides time to 5G networks where GPS/GNSS is unavailable indoors or when distributed PTP cannot meet the required accuracy specifications.
- STL is a Stratum 0 UTC source of time and is used to create a Stratum 1 timing clock compliant with the ITU-T G.8272 PRTC-A performance standard.
- STL works indoors, so wireless carriers do not have to obtain roof rights to install an outdoor antenna, absorb the cost to own and maintain it, or deal with the expense and hassle of coring through concrete floors to run the necessary cabling.
- STL is easy to install and more reliable than GPS/GNSS within challenging environments, meaning that carriers benefit from fewer truck rolls by field service personnel.
- STL can also be used as a redundant source of time for operators that are concerned about the vulnerabilities and cybersecurity threats related to GPS/GNSS.

**Unlike GPS/GNSS, an STL-based solution is ideal for providing timing synchronization to RAN gear in occluded or high multipath urban environments, data centers, and other indoor locations. It just works.**

## Satelles was named as a winner in the most recent Fierce Innovation Awards: Telecom Edition.

STL was chosen by Fierce Telecom and Fierce Wireless for the top spot in the Next-Gen Deployment Wireless category for its ability to operate indoors and in other challenging environments where signals from GPS/GNSS are unable to provide a reliable source of precise time for 5G network synchronization.

The awards committee at Fierce acknowledged that compared to 4G, 5G networks require more precise timing and need it in five to ten times as many locations, including those that are indoors or in occluded environments. GPS/GNSS signals have been used for timing synchronization for years, but it is difficult for them to reach the growing number of places where 5G networks need a source of precise time. The ability of Satelles to overcome these challenges is what made STL the champion in its category.

Visit the awards website (https://www.fiercetelecomawards.com/fiercetelecomawardsco/2022-winners) to learn more about the Fierce Innovation Awards: Telecom Edition and why STL from Satelles was chosen as a winner in 2022.


*Contact Satelles at pnt@satelles.com or visit satelles.com/5g to learn more about award-winning, STL-based timing synchronization solutions.*

**satelles.com**

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