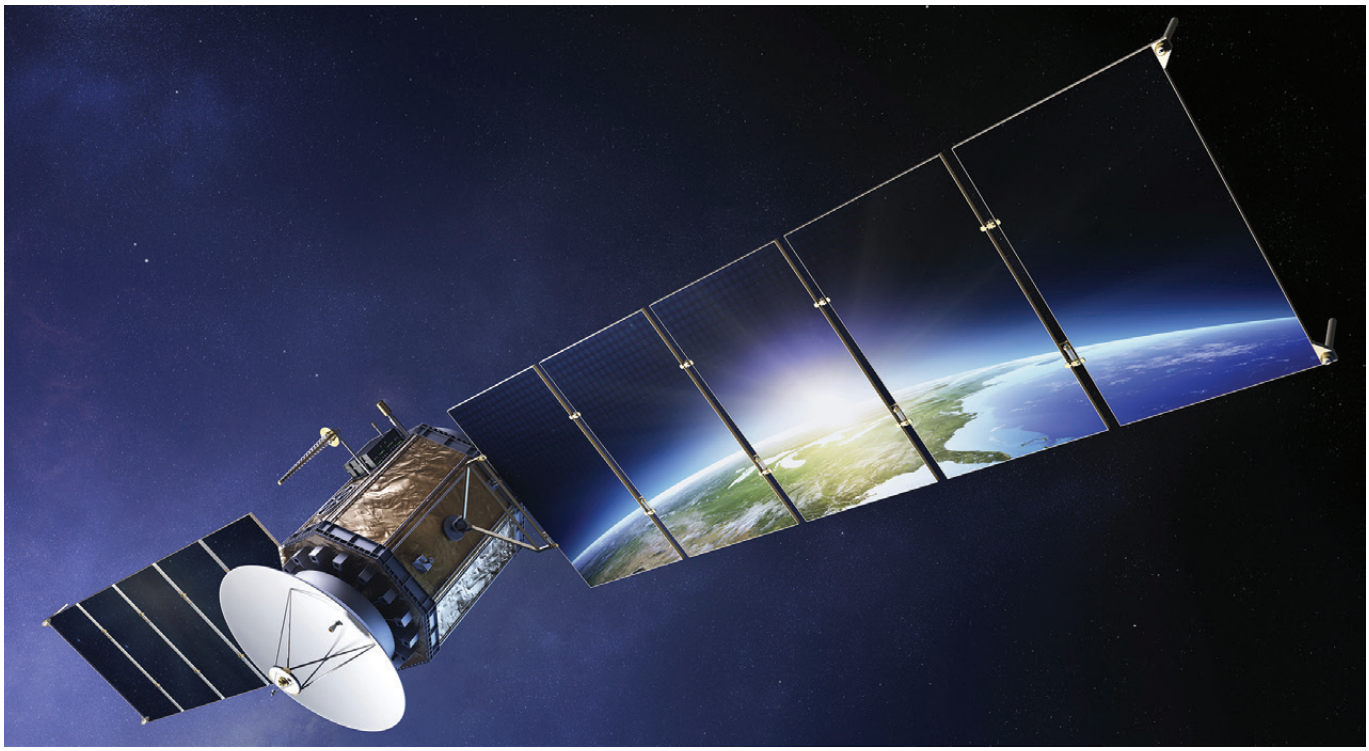
SkyMon

ILS ONE

One-satellite geolocation system. Beyond the limits of traditional satellite interference localization



The advent and growth of data-hungry media like HDTV, mobile services, and satellite radio have made satellite links indispensable for global communication. Revenues in the satellite industry are expected to increase significantly over the coming years.

As an immediate side effect, however, the growing number of services will also increase the amount of interference and anomalies, with negative impacts on data transmission. Other sources of interference include potential acts of terrorism, political unrest, and censorship.

Today only 30 to 40 percent of all satellite interference issues are ever resolved in a timely way, which can lead to damage claims and the risk of losing customers who demand the highest levels of service quality. As a result, there is an urgent need for more effective interference mitigation solutions.

"With Atos SkyMon ILS ONE, we can optimize our service quality to a level that meets and exceeds our customers' demands."

"The use of SkyMon ILS ONE will help minimize our volume of unresolved interferences."

"SkyMon ILS ONE is a geolocation solution that perfectly complements our existing SkyMon CMS system."

Customer statements

Trusted partner for your **Digital Journey**

Atos

Isolated satellites

Existing satellite geolocation systems require at least two geostationary satellites in close proximity to each other in order to obtain sufficient crosstalk for reliable geolocation signal processing. And even though there are hundreds of them out there, many of these satellites are very isolated in terms of using different uplink frequency ranges, polarization and footprint coverage.

This is especially true for military satellites and satellites working in Ka-Band. In these cases, crosstalk is either not applicable or too small to be measurable.

In addition, even if a suitable adjacent satellite is within reach, the system still needs to know the exact positions and velocities - or ephemeris data - of both satellites for accurate geolocation. This can only be guaranteed if the affected and the adjacent satellite are operated by the same provider, or if providers share their satellite operation parameters. The crosstalk on the adjacent satellite will still have to be within the same frequency range and polarization as the interference signal on the affected satellite.

With all of these preconditions, traditional geolocation tools have reached their limits, and operators are searching for alternative solution.

SkyMon ILS ONE - advanced and simple

Atos has developed a one-satellite geolocation solution that provides reliable localization of interference signals without the need for an adjacent satellite.

SkyMon ILS ONE blends seamlessly with Atos' proven SkyMon CMS (carrier monitoring system) without requiring any additional hardware.

A simple software update gives licensed customers access to the world's first true one-sat solution, helping them maximize the level of service quality provided to their customers while at the same time minimizing the risk of damage claims or contract penalties and customer migration.

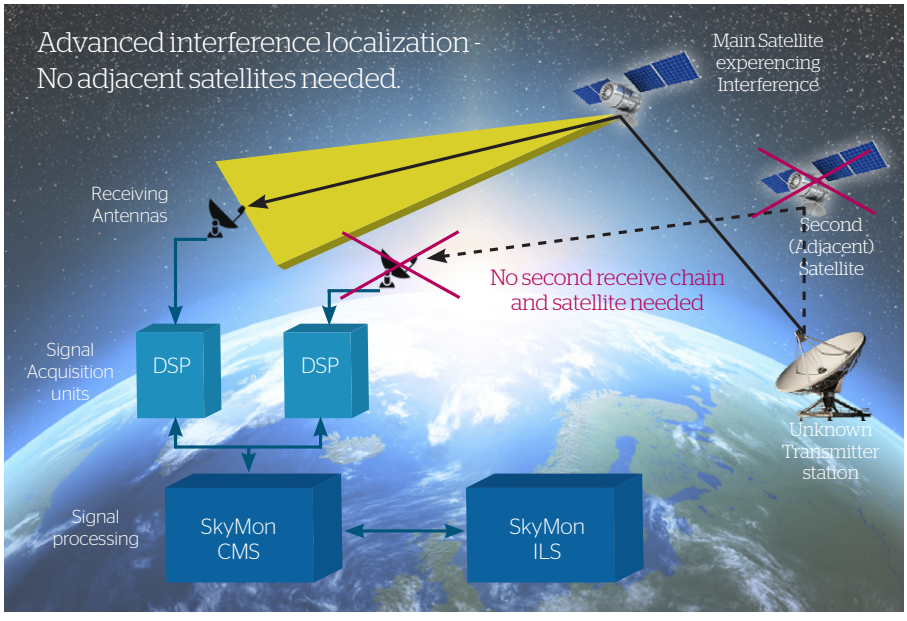
Significant increase in resolved interference issues

SkyMon ILS ONE works by analyzing signal distortions that are primarily caused by satellite movement, atmospheric or weather influences and many other environmental factors.
By comparing such signal distortions of the interference signal with known signals by applying our patented quantum correlation algorithms, SkyMon ILS ONE is able to identify the precise area of the interference source resulting in a significant increase in resolved interference issues well beyond the limits of traditional satellite interference localization systems.

Major benefits of Atos SkyMon ILS ONE

- Allows interference localization even without the need for an adjacent satellite
- Helps operators minimize the number of unresolved interference issues
- Provides an unmatched precision that allows a quick localization of the interference transmit station
- Increases transponder quality
- Ensures the required service quality level demanded by end-customers
- Reduces the risk of contract penalties or damage claims
- Is a cost-efficient investment in advanced interference localization
- Blends seamlessly with existing CMS installations.

SkyMon ILS ONE puts next-generation geolocation at the fingertips of satellite operators right now. It overcomes the limitations and complexity of existing interference localization tools and is an ideal solution for the reliable operation of satellites, regardless of their distance to adjacent satellites.



Find out more about us
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