Satellite monitoring and geolocation system
Ensuring high quality satellite communication
SkyMon is the satellite carrier monitoring and interference localization solution that lets you identify interference and manage carriers in one comprehensive system while minimizing your investments. Its modular architecture can be customized to integrate with your existing infrastructure. SkyMon has also been enhanced with Carrier ID Functionality.

The advent and rise of data-hungry media like HDTV, mobile services and satellite radio have made satellite links indispensable for global communications. Subsequently, revenues of the satellite industry are expected to rise significantly over the coming years. However, the amount of interferences and anomalies that negatively affect data transmissions will increase even more as a direct side-effect of the growing number of satellites crowding the Earth’s orbit.

With SkyMon, you can both identify and localize satellite interferences in one single solution and on one intuitive graphical user interface (GUI) in order to take counteractive measures immediately. SkyMon is a sophisticated automated radio frequency traffic monitoring system that gives you all the necessary tools to continually monitor the links between your satellites and your ground stations from one central hub, obviating the need for investments at your various locations around the globe. SkyMon includes a fully integrated comprehensive geolocation system that lets you precisely localize any type of detected interference, so you don’t waste precious time transferring data to external localization applications and are able to start a coordinated reaction right away.

Because it is the first system that fully supports the complete Ka-band, it monitors all types of satellites you operate. Furthermore, it even detects and measures carriers superimposed by any number of other carrier signals.

SkyMon works best with the dedicated SkyMon Box monitoring device for standard spectrum monitoring and demodulation measurement. However, thanks to its modular architecture, SkyMon easily integrates with and re-uses your existing infrastructure, such as your spectrum analyzers or down converters, and is easily extendable with any equipment you will buy in the future.

**SkyMon - proven, reliable and highly scalable**

“We have operated SkyMon for 12 years and today it is deployed at more than 10 sites around the world, managing 57 antenna front ends in total. The system has always proven to be reliable and trouble free and is completely redundant across multiple sites.”

“Atos has always supported us in the continuous expansion of our system and system functionalities, some of which were developed on our requests and some as part of Atos efforts to continually enhance the system.”

**Customer feedback**

This is a very serious issue - satellite operators may not be able to deliver the required level of service quality, leading to high contract penalties and ultimately to increased churn rates.

**Carrier Monitoring & Signal Analysis**

**Interference Localization**

**Content Monitoring**
Because SkyMon monitors your satellite links with utmost precision and reliability, you can always depend on the results. Its automatic calibration functions guarantee permanent high-precision measurements at +/-0.1 dB accuracy - regardless of temperature fluctuations or atmospheric interferences. Therefore, SkyMon precisely detects and measures even the faintest signals, no matter if they are barely above the floor noise or if they are masked by other signals.

SkyMon is the only system on the market with an integrated geolocation system. It enables you to detect, classify and localize interferences without the necessity to manually transfer data to external applications. This saves you a lot of valuable time when you have to react to a specific problem.

SkyMon is the first Carrier Monitoring System which supports both Carrier ID types: the NIT-CID and the Meta Carrier DVB CID. The Carrier ID is fully integrated into the SkyMon Carrier Monitoring System and doesn’t require any additional HW for DVB-CID detection.

SkyMon allows you to not only to check for interferences, but also to monitor the content of the signal in real-time. It provides simultaneous live measurements of MPEG-2 and H.264 video sources, both in SD and HD quality, and the Mosaic display lets you control several channels on one single screen, no matter if it’s video or audio signals.

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Flexible architecture - customized to fit your needs, minimizing your investments

The SkyMon architecture allows for different configurations. From single monitoring sites equipped with one measurement device all the way to multi-site configurations with several measurement devices on each site - SkyMon adapts to fit your exact needs. SkyMon also automatically optimizes the throughput and accuracy of your existing equipment, such as monitoring antennas and measuring devices, minimizing your need to invest in additional hardware.

SkyMon’s multi-site capability is one of its most outstanding features. It connects your ground stations around the world via a VPN (Virtual Private Network) on the internet or via your intranet, allowing you to monitor your satellite links from just one single hub, which can also be accessed from a remote location. This gives you a comprehensive overview of your entire network of satellite links on one single screen.

Intuitive and flexible usage measurement modes - complete control at all times

SkyMon allows for different degrees of operator involvement depending on the specific usage situation. The automatic background mode monitors the traffic in a round robin fashion, 24 hours a day, 7 days a week without your input. It is your safety net that issues automatic alarms whenever a serious problem arises. SkyMon also features various foreground modes that let you directly control selected devices and run specific measurements, giving you the opportunity to actively manage your various satellites links.

Regardless of which mode you choose - the system’s intuitive GUI provides you with a clear overview of all relevant facts and data. It has been developed together with satellite operators to make your daily tasks as easy as possible. Additionally, various templates help you write the most common types of reports quickly and efficiently.

High precision technology measurements you can rely on

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Interference measured - interference found

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About Atos

Atos is a global leader in digital transformation with approximately 100,000 employees in 73 countries and annual revenue of around €13 billion. The European number one in Big Data, Cybersecurity, High Performance Computing and Digital Workplace, The Group provides Cloud services, Infrastructure & Data Management, Business & Platform solutions, as well as transactional services through Worldline, the European leader in the payment industry. With its cutting edge technologies, digital expertise and industry knowledge, Atos supports the digital transformation of its clients across various business sectors: Defense, Financial Services, Health, Manufacturing, Media, Energy & Utilities, Public sector, Retail, Telecommunications and Transportation. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, Unify and Worldline. Atos SE (Societas Europaea) is listed on the CAC40 Paris stock exchange.

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Let’s start a discussion together