

Monics

Satellite Carrier Monitoring System

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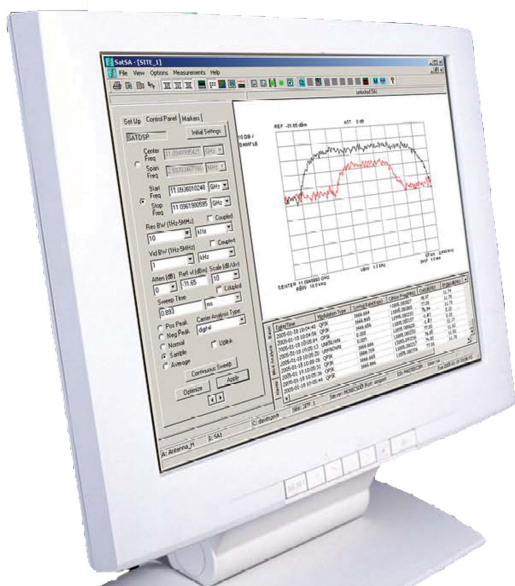
In an environment that changes as rapidly as today's telecommunication industry, monitoring assets is a challenge that very few companies are prepared to meet. Through its wholly-owned subsidiary, SAT Corporation, Integral Systems, Inc., (ISI) is leading the way with the Monics Carrier Monitoring System.

General Description

Monics is a turnkey installation designed and delivered by SAT Corp. The system's goal is to ensure that the communications assets of today's preeminent satellite service providers are operating normally. Monics is an automatic Satellite Carrier Monitoring System that checks carrier presence and performance at local and remote sites, comparing actual service performance with expected results. At any time, manual measurements can be performed without interrupting automatic background measurement routines. Monics products can use a combination of spectrum analyzers and SAT-DSP, allowing operators to make time domain measurements such as modulation analysis, TDMA spectrograms, and Carrier-under-Carrier recognition analysis. SAT-DSP greatly increases measurement speed, allowing entire bandwidths to be measured at a much faster rate.

Features

- ♦ Efficient and friendly user interface
- ♦ Networked and expandable architectures
- ♦ Simultaneous automatic and manual monitoring
- ♦ Automatic carriers monitoring
- ♦ Digital signal processing to analyze signals
- ♦ Carrier under carrier analysis and FEC reorganization
- ♦ TDMA advanced analysis
- ♦ Open database interface



Monics Versus Spectrum Analyzer

Why choose a SAT Monics system rather than a simple Spectrum Analyzer? The following items explain Monics' advantages over a traditional spectrum analyzer:

Ease of Use

Monics is an MS Windows-based tool for PCs. The interface is self-explanatory and quickly understood by even a novice operator.

Automatic Unattended Measurements

Monics automatically monitors all carriers without the presence of an operator. The automatic monitor allows operators to perform manual analysis with little impact on the operator monitoring process. The automatic scheme is defined by the operator through a simple "point-and-click" monitoring plan.

Storing Historical Measurements and Reports

In a departure from analog techniques (i.e., spectrum analyzers), measurement data are automatically stored for analysis (e.g., EIRP, center frequency, bandwidth, and C/N). This data can also be played back at a later date.



SAT-DSP-5000 Instrument

Alarms and Thresholds on Non-Compliant Carriers

Abnormal carrier performance is detected and the operator alerted. Measurements, data and spectral traces are stored for reference and further analysis, and can be replayed at any time. The system can also perform a number of actions related to each anomaly (e.g., sound an alarm, call a pager, send a text message or transmit an e-mail message).

Manage a Multiple Monitoring Site Network From a Single Control Center

Simultaneously control a number of geographically spread monitoring sites and any combination of spectrum analyzer or SAT-DSP at each site. Monics allows users to share monitoring equipment among all operators on a Monics LAN.

Multiple Inputs, Multiple Carriers Measured Seamlessly

Monitoring plans can include any combination of IF and RF. Operators only need to select the carrier and the system to connect relevant site/antenna/measurement equipment. Monics displays simultaneous co-polarization and cross-polarization signals.

Adapt Measurement Techniques

Monitoring plans can be defined so that each carrier is tailored with the most accurate settings, thereby avoiding false alarms.

Digitizer Monitoring System

The SAT-DSP takes measurements at a fraction of the time it takes for a traditional spectrum analyzer. This helps monitoring plans re-measure carriers at a much faster rate.

Distributed Monitoring System

From anywhere within the Monics LAN, any operator can monitor and control all monitoring sites, regardless of location. Multiple operators can share the monitoring instrument.

Interference Detection

Interference is **THE** major issue confronting today's satellite communications industry. The combination of Monics software and digitizers enables operators to remain informed of any unexpected carriers. All measurements are made on an unexpected carrier to characterize it and open the door to geolocation.

Conclusion

As a cost-effective solution for monitoring any size telecommunication network, Monics has proven its efficacy with many different operators and is the de facto standard for Carrier Monitoring Systems. Its advantages over a spectrum analyzer solution are multiple and clear.

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