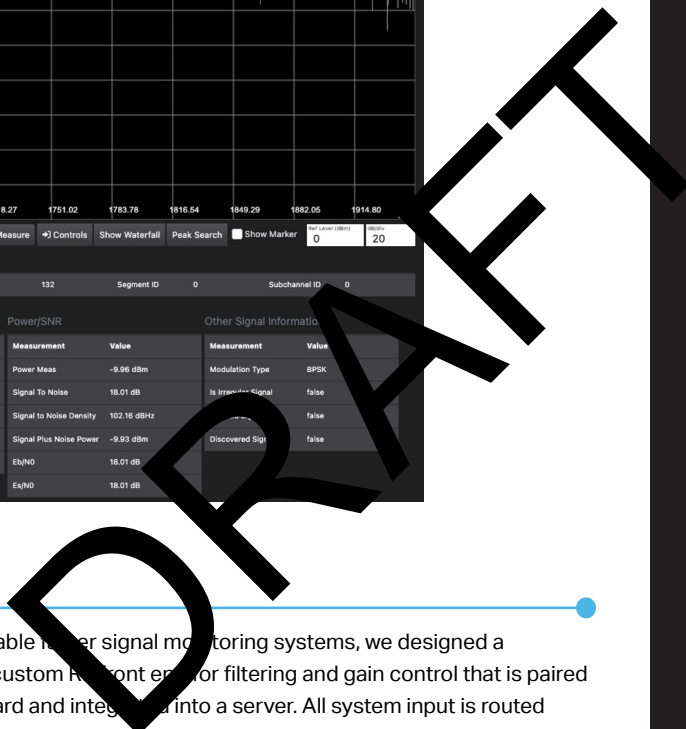




**TROUBLESHOOT SIGNAL ANOMALIES**

signal:IQ maximizes resources and tracks Service Level Agreements (SLAs) effectively. With the software solution, your data tasks are automated—troubleshoot issues with our alarming capability and leverage our extensive API to write your solution, ultimately decreasing the use of satellite power and extending satellite life. View an in-depth, comprehensive spectrum analyzer using our intuitive GUI. By using the spectrum’s capabilities to its full extent, you can identify signal anomalies and transmission configuration issues, pointing issues, frequency overuse, or other unintentional and intentional interference therefore producing additional revenue.



**DEPLOYMENT**

To allow for high channel density to enable higher signal monitoring systems, we designed a component-driven digitizer system: a custom front end for filtering and gain control that is paired with a Xilinx-based RF SoC front end card and integrated into a server. All system input is routed through our custom I/O connection panel that is specifically designed for signal and timing reference signal routing to a flexible array of digitizers.

The modularity of our sensor software achieves efficient and economic scalability and on-demand orchestration that is amplified when the software is deployed in a modern, containerized system for rapid access to data and real-time processing capabilities. By leveraging the scalability and on-demand orchestration, along with our flexible SOFTLINK architecture and sensor software modularity, we can provide a full, end-to-end solution or deploy components separately.

**THE COMPONENTS**

**SENSOR API**

Supply an entry point for received signals from a variety of source locations with the capability to manually manage the sensor with the provided User Interface (GUI).

**DATA CAPTURE**

Capture data, in real time, on up to 8 channels for an extensive reach of signal monitoring.

**WIDEBAND CHARACTERIZATION**

Perform analysis over a wideband spectrum, and find signals using Blind Signal Search (BSS) for reliable accuracy, in-depth and usable visualizations, and a variety of deployment options.

**SIGNAL CHARACTERIZATION**

Conduct analysis / characterization of a desired signal with advanced functionality of control and operating parameters for high-performing and usable visual results as well as a scalable number of measurement instances.

**MEASUREMENT DATABASE**

Store a collection of analysis / characterization results with Influx Database to provide measurements in a range of formats (Kafka, XML, JSON).

**PLANNING AND ALARMING**

Build custom monitoring plans to establish an alarming technique that reports deviations or changes.



- [www.arka.org](http://www.arka.org)
- [@AMERGINT](#)
- [@AMERGINT](#)
- [amergint-technologies](#)

**FOR ADDITIONAL INFORMATION:**

2315 Briargate Pkwy., Suite 100  
 Colorado Springs, CO 80920 USA  
 Tel: 719-522-2800 | Fax: 719-522-2810  
 Email: [info@amergint.com](mailto:info@amergint.com)