Signal Hound Debuts SM200A 20-GHz High-Performance Spectrum Analyzer

Combines 110-dB dynamic range, 1-THz sweep speed, and 160 MHz real-time bandwidth with compact form factor for low-cost entry to high-end test at $11,900

LA CENTER, Wash.—February 28th, 2018— Signal Hound, a developer of highly optimized solutions for RF signal test and measurement, has announced the SM200A 20 GHz headless RF spectrum analyzer and monitoring receiver for applications ranging from IoT and 5G cellular, to military, aerospace, spectrum management, automotive, and radar. Optimized for performance, flexibility, space, and cost, the SM200A lowers the cost of entry to high-end spectrum analysis while delivering precisely what’s required for the most demanding production-line and spectrum monitoring RF analysis applications.

“We see customers under constant pressure to both meet the needs of rapidly evolving signal-analysis requirements, while also needing to reduce test time and cost and make maximum use of available test space,” said Cory Allen, Marketing Director at Signal Hound. “The SM200A is designed from the ground up to provide only what’s needed in today’s test environment and spectrum monitoring deployments, with maximum performance and speed, at much reduced cost and size.”
**High-performance specifications**

The SM200A tunes from 100 kHz to 20 GHz, has an instantaneous bandwidth of 160 MHz, a high dynamic range of 110 dB, a sustained sweep speed of 1 THz/s, a built-in sub-octave preselector from 20 MHz to 20 GHz, and ultra-low phase noise -- introducing no more than 0.1% error to EVM measurements. This low level of phase noise rivals the most expensive spectrum analyzers on the market. Its system noise ranges between 13 dB and 19 dB between 700 MHz and 15.2 GHz.

**Efficient design**

The SM200A’s headless design is a reaffirming nod toward Signal Hound’s minimalist philosophy, providing the small form-factor desired by test-bed and production-line designers and making it ideal for remote-monitoring installations. The unit measures 10.2 x 7.2 x 2.15 inches (259 x 183 x 55 mm) and weighs 8.67 lbs. (with passive cooling, AC desktop adapter, and power cord).

Architecturally, the SM200A distributes its digital signal processing requirements for high-speed RF signal analysis across an on-board Altera Arria-10 FPGA and an external PC with an Intel Core i7 processor. This provides users with the flexibility to scale to any current or future configuration. The analyzer can be accessed remotely over a network via the PC to which it’s connected, and it also includes a built-in GPS for automatic time and geolocation stamping of the received signals.

The SM200A offers a fully-documented API supporting features such as spectrum sweeping, setting record-on-event triggers, real-time analysis, and streaming of calibrated I/Q data.

The SM200A is shipping now, with a U.S. retail price of $11,900. Signal Hound builds-to-stock as opposed to building-to-order, resulting in same-day or next-business-day shipping. However, significant pre-orders with the SM200A have created a backlog that it will take until approximately 15 April 2018 to fulfill, at which point new orders will begin shipping. Visit [https://signalhound.com](https://signalhound.com) for SM200A backorder status updates, or email [sales@signalhound.com](mailto:sales@signalhound.com) for more information.

**About Signal Hound**

Signal Hound is a manufacturer of affordable, high-performance test equipment based in La Center, WA. Starting out as Test Equipment Plus in 1996 and offering used test equipment and repair services, Signal Hound expanded its offerings in 2010 with the introduction of the USB-SA44 USB-powered spectrum analyzer. Signal Hound has since added several award-winning RF spectrum analyzers and signal generators, now sold globally.