

Rohde & Schwarz expands its system amplifier portfolio with the R&S®SAM200 for applications up to 53 GHz

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The SAM®200 is a smart, advanced, robust solid-state power amplifier with integrated power detector, USB/LAN functionality and switchable RF-paths, controlled by its own web GUI.

Munich, 24.09.2026 - Rohde & Schwarz announces the launch of the SAM200 system amplifier, an extension to the successful SAM100, marking a significant expansion of its amplifier portfolio. While the original SAM100 covers 2 GHz to 20 GHz, the new SAM200 and SAM200 Advanced models extend this capability from 20 GHz to 53 GHz with up to 4 watts of saturation power. This advancement addresses the urgent market demand for testing solutions in the Ka-band, Q-band, and V-band, which are increasingly critical for next-generation satellite solutions and modern telecommunications standards.

The SAM200 serves as a high-performance gain block, while the SAM200 Advanced introduces a smart, advanced feature set designed to streamline complex laboratory workflows. With an integrated power detector, this advanced version includes USB and LAN interfaces, a web-GUI and a switchable three-path functionality that allows users to toggle between low noise/high gain, regular and low gain modes to optimize EVM signal quality in combination with vector signal generators or network analyzers, for instance.

Designed primarily for RF-component testing where signal generators or vector network analyzers may have limited output power, the SAM200 family provides outstanding RF performance, excellent linearity and superior noise characteristics. Its wide frequency coverage means that a single amplifier can now replace multiple narrowband units, significantly reducing equipment footprints and overall system costs. The units are available in both desktop and 4 HU rack-mounted configurations to suit various integration needs.

As a solid-state power amplifier, the SAM200 ensures high availability through robust output mismatch protection and a gradual power foldback mechanism. This design maintains continuous operation even under challenging load conditions, preventing equipment damage and minimizing downtime in critical testing environments. Product Manager Harald Specker emphasizes the strategic value of the new release: "By extending our frequency range up to 53 GHz, we now provide a seamless ecosystem of generators, analyzers and amplifiers, positioning Rohde & Schwarz as a full solution provider for the evolving needs of the satellite, aerospace and 5G mobile communications industries."

https://www.rohde-schwarz.com/de/unternehmen/news-und-presse/all-news/rohde-schwarz-expands-its-system-amplifier-portfolio-with-the-rs-sam200-for-applications-up-to-53-ghz_229356-1687808.html