# **R&S BTC (Broadcast Test Center) New Modular High End Test Platform**

All —in-One test platform that offers broadcast equipment testing under realistic and complex interference conditions.

ohde & Schwarz, the world leading testing solutions provider recently announced a test platform R&S BTC that provides nearly all audio, video and multimedia applications-in a single device. The RF reference signal generator generates RF signals for all global TV and broadcasting standards and simulates transmissions. The generator can also internally analyze the audio/video functions of DUTs in realtime. The modular design provides a high degree of scalability, allowing the R&S BTC to be configured for any customer requirement.

# A totally new dimension

The R&S BTC reference signal generator enables users to perform complete end-to-end tests in realtime over all open systems interconnection (OSI) levels. DUTs can also be integrated into fully automated test sequences. This all-in-one generator handles today's and tomorrow's transmission standards. Video and audio streams can be generated, played back, fed externally and output in modulated form. The R&S BTC combines signal generation, DUT embedding and video/audio analysis while simultaneously determining the picture failure point (PFP). The result is fast, convenient and reproducible objective picture quality assessment.

Applications include development, Certification and quality assurance for chipset and receiver manufacturer as well as test house. Manufacturers of professional satellite equipment, network operators, rental companies, regulatory authorities and the A&D industry will also benefit from this scalable test solution.

The R&S BTC high-end broadcast signal generator has two separate realtime signal paths, each with a modulation bandwidth of 160 MHz The R&S BTC comes with a

## **Key Facts**

- · Signal generation and DUT analysis
- Modular design
- Automated test sequences in line with recognized test specifications
- Realtime video/audio transport stream generation
- Realtime signal generation for all global broadcasting standards

comprehensive range of analysis feature and support all common digital and analog standards for cable, satellite and terrestrial television as well as digital and analog audio broadcasting standards and second-generation DVB standards such as DVB-T2 DVB-C2, DVB-S2 and their interfaces.

Thanks to its modular design, the R&S BTC can be optimized to perform a variety of tasks. This saves money since it eliminates the need for expensive and time consuming test setups with many separate T&M INSTRUMENTS. Integrated, automated test sequence control and test suites, such as DTG dbook, e-book and Nor Dig. Reduce test times. The repeatable tests allow otherwise time consuming certification and logo tests to be carried out quickly and reliably.

One of the main tasks when developing broadcast



Rohde & Schwarz continuously invests in training its service and sales personal to maintain a high level to technical competence in pre and post sales support.

equipment is to test the equipment under realistic and complex interference conditions. The R&S BTC covers this requirement by offering up to eight arbitrary waveform generators (AWG) per RF path in addition to the two independent real time signal paths. The AWGs generate complex interference scenarios with a maximum dynamic, range over the entire frequency bandwidth. Realistic environmental conditions can be simulated using various noise source (broadband and band limited AWGN, Impulse of Phase noise), Predistortion, nonlinearities, Filtering, Fading and MIMO.

Developers of chips and tuners need I/Q data to be highly flexible in terms of data rates and data formats. The R&S BTC is equipped with digital I/Q data interfaces and flexible I/Q data input/output for ideal test and design capabilities.

The high resolution, 8.4-inch touch screen display and the graphical user interface with hierarchical function blocks allow users to quickly and easily operate the R&S BTC. The entire test setup, including signal generation, sequence control, analysis and the DUT, can be graphically displayed for a clear overview of even complex measurement tasks. The remote control commands are compatible with the successful R&S SFx family, also with the R&S SFU, an internationally established multistandard reference signal generator. This simplifies the integration of the R&S BTC in existing test environments.

The R&S BTC reference signal generator is now available from Rohde & Schwarz.

# **Optimizing costs**

Due to its extremely fine scalability, the R&S BTC can be tailored to meet different customer and test requirements while simultaneously optimizing costs. This eliminates the need for expensive and time-consuming test setups with many separate T&M instruments.

Integrated and automated test sequence control as well as test suites ensure that test results are reproducible while reducing rest times

### **About R&S**

Rohde & Schwarz is a technology driven group with an international presence in more than 70



Mr. Yatish Mohan Managing Director, Rohde & Schwarz India Pvt. Ltd.

In the interview with Mr. Yatish Mohan, Managing Director for Rohde & Schwarz India – The Company is constantly improving its sales in India market and planning to be ahead in the competition.

They are planning to target education market – the promising sector for T&M industry and promises to offer the innovative and low cost solutions that highly demands in this industry.

countries in the field of test & measurement, information technology, communications and broadcasting. For more than 75 years the company has been designing, manufacturing and marketing a wide range of state-of –the –art testing solutions for the electronics capital goods sector.

Its T&M division specializes in manufacturing instruments for the aerospace, defense, research, automotive, IT systems, consumer electronics and telecom sectors. Its product range includes a wide range of spectrum analyses for both analogue and digitally modulated signals for each market segment with user specific applications.

Its company, Hameg GmbH is able to cater to the wide base, general purpose, high volume market requirements to supply equipment like power supplies, signal synthesizers and analyzers up to 3 GHz, oscilloscopes, LCR meter etc.