Fraunhofer
HHI

NAB 2017: Encoding and multiplexing solution from Rohde & Schwarz leads in HEVC and HDR

The R&S AVHE100 is a compact, yet flexible and scalable encoding and multiplexing solution. It offers the best video quality on the market today, including for today's most advanced video coding standard HEVC – in both HD and UHD. It also fully supports high dynamic range (HDR) video transmission.

Munich, April 24, 2017 — The encoding and multiplexing solution from Rohde & Schwarz offers the best video quality available on the market for HEVC-encoded content in HD to UHD resolution. This has been proven in numerous quality and stability tests against established competitors. The integrated HEVC encoder was developed and licensed by the Fraunhofer Heinrich Hertz Institute (HHI). The Fraunhofer HHI was also instrumental in the development of the HEVC standard. The R&S AVHE100 is ideal for replacing existing encoder installations with more efficient devices. It can also be used in IPTV and cable networks as a large-scale headend system for transmission via satellite or terrestrial networks (DTT).

In the fall of 2016, during a 4K summit in Seville, Spain, Rohde & Schwarz set up a complete terrestrial broadcast system for demonstration purposes. The core of the system was the statistical multiplexing offered by the R&S AVHE100. It was the first solution to broadcast three UHD services in 2160p50 resolution via a single DVB-T2 signal. The R&S AVHE100 is unique in that it can encode multiple video streams in UHD format and combine them into a statistically multiplexed signal. This efficient data rate utilization makes it possible to broadcast more programs and improve video quality.

Software-based and flexible

The transmission of premium channels in HDR is becoming increasingly important. HDR makes significantly more details visible in both light and dark areas of the screen. The R&S AVHE100 fully supports the HDR feature and has been successfully deployed in many tests.

The R&S AVHE100 is a complete software-based platform that runs on standard IT components. Extensions and improvements to coding and broadcast standards are easily added. The integrated orchestration of the core functionality in the headend management system can replace an external management system in most scenarios, making the R&S AVHE100 a secure investment for the future – one that considerably reduces acquisition and operating expenses (CAPEX und OPEX). Optional multi-year service level agreements (SLA) fulfilled by the international service organization provide even more security.

The decades of experience that the independent Rohde & Schwarz has gained in the broadcast industry can be seen in the smart redundancy concept and in the many reliability features that ensure high availability. The R&S CrossFlowIP function developed by Rohde & Schwarz provides uninterrupted signal switching of input and output signals during redundancy operation, enabling seamless signal switching during maintenance and in the event of faults without an external management system.

The R&S AVHE100 encoding and multiplexing solution from Rohde & Schwarz supports the digital broadcast standards used around the world. Optional functions, such as encryption, monitoring and redundancy solutions (R&S CrossFlowIP), are available.

The encoding and multiplexing solution and other highlights from the broadcast and media specialist can be viewed at the NAB in Las Vegas, April 22 to 27, 2017, in the South Lower Hall, booth SL1205. The Fraunhofer HHI will present the latest innovations in the field of video coding at the Fraunhofer booth 6110 in the South Upper Hall.

Press contacts:
Europe (headquarters): Patrizia Muehlbauer, Phone: +49 89 4129 0, E-mail: press@rohde-schwarz.com

North America: Pam Sanders, Phone: +1 410 910 7908, E-mail: pam.sanders@rsa.rohde-schwarz.com

Asia Pacific: Wen Shi Tong, Phone: +65 6 307-0029, E-mail: press.apac@rohde-schwarz.com

Contacts for readers:
Customer Support Europe, Africa, Middle East: +49 89 4129 12345
customersupport@rohde-schwarz.com

Customer Support North America: +1 888 TEST RSA (+1 888 837 87 72)
customer.support@rsa.rohde-schwarz.com

Customer Support Latin America: +1 410 910 79 88
customersupport.la@rohde-schwarz.com

Customer Support Asia Pacific: +65 65 13 04 88
customersupport.asia@rohde-schwarz.com

Customer Support China: +86 800 810 8228 or +86 400 650 5896
customersupport.china@rohde-schwarz.com

Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in all fields of wireless communications as well as in IT security. Founded more than 80 years ago, the independent company has an extensive sales and service network with subsidiaries and representatives in more than 70 countries. On June 30, 2016, Rohde & Schwarz had approximately 10,000 employees. The group achieved a net revenue of approximately EUR 1.92 billion in the 2015/2016 fiscal year (July to June). The company is headquartered in Munich, Germany, and also has strong regional hubs in Asia and the USA.

R&S ® is a registered trademark of Rohde & Schwarz GmbH & Co. KG.

All press releases, including photos for downloading, are available on the Internet at http://www.press.rohde-schwarz.com.