Portable Receiver Offers LTE and Cable System Interference Detection and Spectrum Clearing

Rohde & Schwarz has developed an advanced portable receiver and directional antenna for interference detection and spectrum clearing of LTE and cable systems. The R&S PR100 Series portable receiver operates in a wide frequency range from 9 kHz to 7.5 GHz, and when combined with the company's HE300 Series GPS enabled directional antenna, is desirable for quickly detecting and locating sources of interference disrupting LTE and cable systems. Featuring a compact and lightweight design, the R&S PR100 features exceptional digital signal processing that delivers high receiver sensitivity to enable detection of extremely weak signals without loss in processing speed. The R&S HE300 Series directional antenna features an integrated electronic compass, in addition to GPS, to quickly detect and assist in eliminating the source of interference.

Unwanted interference can affect signals in several ways. Ingress interference can be most effectively mitigated by better equipment design (STB/modem) and improvement of outdoor and indoor cable plant. Egress interference can have a substantial impact on the operation of LTE services in licensed 700MHz spectrum and has both technical as well as regulatory consequences. Previous techniques and tools used to measure egress at a single frequency in the VHF aeronautical band have shown themselves to be insufficient for diagnosing or locating issues in the 700MHz band, although the mitigation methods for resolving egress remain the same for both frequency ranges.

The R&S PR100 portable receiver's advanced functions and control concept have been optimized for RFI, electrical interference and intermodulation interference monitoring tasks. The receiver combines portability, ease of operation and direction finding capabilities to provide an ideal solution for tracking down unwanted interference. Despite its compact design, the R&S PR100 offers a wide range of functions otherwise available only in larger equipment with higher price points. Its favorable price/performance ratio makes it an indispensable instrument for all radio

monitoring tasks where high mobility and cost efficiency are crucial.

The R&S PR100 portable receiver features a built-in SD card for storage of measurements and provides LAN interface for remote control and data output. A 6.5" color screen clearly displays spectrums and spectrograms (waterfalls).

Rohde & Schwarz
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