RI 700 Carrier-to-Noise Generator, 0.5-2.7 GHz, 8 ch

Wideband Carrier-to-Noise Generator with high dynamic range and web browser user interface

Overview
The Ranatec RI 700 is a wideband Carrier-to-Noise Generator with 8 separate channels. Noise spectral density can be set to any value between -174 and -93 dBm/Hz in 0.5 dB steps.

Hardware architecture
Each channel has a separate noise source which means that all channels are uncorrelated. Each channel has an internal combiner that is used to add the controlled noise to the user carrier. The SNR of the user carrier can then be controlled by adding a suitable amount of noise. By adding the SNR option, the carrier-to-noise ratio is accurately calibrated and monitored. The user has the possibility to enter C/N0 through the web interface.

Features:
• 0.5 - 2.7 GHz signal and noise frequency range
• -93 dBm/Hz maximum noise spectral density
• 81 dB SNR range
• 8 channels with uncorrelated noise sources
• ±3 dB noise flatness over full band
• <0.1 dB/°C noise stability over temperature
• Internal webserver
• Configurable IP settings
• 19°, 2HU rackmountable chassis

Software architecture
As default, the instrument is controlled through a web interface. The output spectral density of each channel is set in any web browser, totally independent of operating system. This feature also gives the possibility to control the instrument over internet, independent of geographical position. If you need to control it in another way, there are options available for all standard communication interfaces.

Applications
The RI 700 is designed to cover all cellular bands, making it ideal for applications such as:
• BER test
• Receiver test
• Handover test

Ordering
RI 700   8 channel Noise Generator
RI 700 - XX XX channel Noise Generator
Option SNR  Adds full Carrier-to-Noise Generator functionality
Option RS232  Remote control via RS232
Option GPIB  Remote control via GPIB
Option LAN  Remote control via LAN (emulated COM port)
Option MMI  Adds control via touchscreen display

The output spectral density of each channel is controlled individually.