Voice Processing Unit (VPU) R&S® GN2110

Improvement of speech intelligibility by suppressing noise and interference

The R&S® GN2110 is a multifunction speech processing module which can be extended and configured for different tasks and functions. It is provided in its basic model a DSP-supported NRU (noise reduction unit).

The functions of the NRU enable:
- Higher speech intelligibility through effective suppression of interference and noise on the receive channel
- Speech-selective squelch function, i.e., speech-controlled, syllabic muting circuit
- Suppression of acoustic interference and noise during speech input (microphone) prior to transmission
Depending on its application, the NRU may be configured for one of the following function blocks per software:

- **NRU (transmission)**
  - FKT. 1
- **Syllabic VOX (TX)**
  - FKT. 1, PTT-only (no VOX)
- **Syllabic squelch (RX)**
  - FKT. 3
- **NRU (reception)**

In addition to the NRU tasks described above the R&S®GN2110 can also be supplied with a speech scrambling submodule. This scrambler ensures the privacy of a speech or telephone link via the shortwaves by coding the speech contents prior to transmission thus making it unintelligible for the unauthorized listener on the radio link and by decoding at the receiver to obtain a clear language output. A modifiable code key with 4096 codes changes the scrambling algorithm making eavesdropping more difficult.

### Specifications
- **NRU**: ON/OFF
- **PRIVACY**: ON/OFF
- **Code number configurable**

### Ordering information
- **Voice Processing Unit**
  - **with NRU**: R&S® GN 2110
    - Code number configurable
  - **with NRU + SCR**: R&S® GN 2110
    - Code number configurable
  - **Code number configurable**

More information at [www.rohde-schwarz.com](http://www.rohde-schwarz.com) (search term: GN2110)