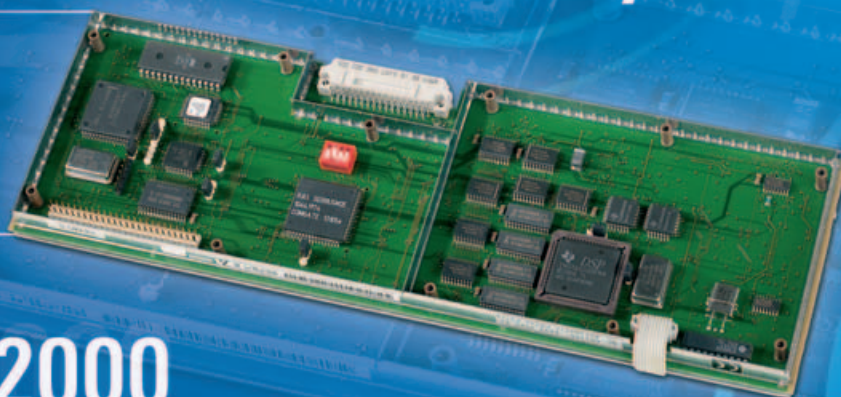


# HF Transceiver Family



## XK 2000

## APP (Automatic Phone Patch) R&S® GN2100

Telephone-like operation for direct dialling in half-duplex mode

The APP option ensures automatic (as well as manual) routing of telephone calls to and from an HF link. When the option is used together with the radio processor option R&S® GS2200 + ALE software, the telephone number of the called subscriber can be reliably transmitted in addition to the automatic selection of the HF channel (link setup).

Fully featured DTMF phones (short-code dialling, etc) serve as terminals in an HF radio system equipped with APP and ALE options at both ends. The talk/listen switchover in semiduplex is voice-controlled by means of a VOX circuit. The APP automatically adapts itself to the telephone line (hybrid balance) during the linkup to the end subscriber (to PABX or PTT network) to achieve optimal transmission from radio to line network and vice versa. Via voice and tone prompts the subscribers receive information on the state and progress of the automatic linkup to the called subscriber.

The APP is operated from the front panel via keys, a graphic display, softkeys and a menu-guided user interface. If the R&S®XK2000 is the terminal unit, the numeric keypad is used for entry, the loudspeaker for signalling and the phone receiver as the talk/listen facility.

The optional voice processing unit enables the voice signals not only to be freed from transmission interference but also to be encrypted, i.e. protected against interception.

**Note**

Any access to a public telephone network must be in compliance with the applicable local PTT regulations.

The technical interface specifications of the APP's telephone box are designed to comply with German regulations FTZ 1 TR 2 and FTZ 144 TV 41 regarding equipment connected to telephone lines.

**Specifications**

Consisting of plug-in APP R&S®GN2100 as well as telephone connecting box.

Output level to phone line	nominal -7dBm (adjustable: -16 dBm to -4 dBm in 3 dB steps)
Input level from phone line	nominal -7 dBm (adjustable: -16 dBm to -4 dBm in 3 dB steps)
Frequency response	±2 dB, 300 Hz to 3200 Hz
Output impedance to phone line	600 Ω
Ultimate hybrid balance (into 600 Ω)	typ. -50 dB over 300 Hz to 3200 Hz bandwidth, measured with single tone
Hybrid impedance matching capability	0 Ω to ∞ Ω complex impedance
Dialling	DTMF or pulse dialling, all timing parameters are configurable
Functional control (from the phone line)	DTMF tones (from normal 12-key-pad)
Phone line connections	screw terminals

**Ordering information**

Automatic Phone Patch	R&S®GN2100	6033.9505.02
APP Software	R&S®GN2100S	6090.5805.02

More information at [www.rohde-schwarz.com](http://www.rohde-schwarz.com) (search term: GN2100)



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