

HF Transceiver Family



R&S® XK 2000



HF Modem R&S® GM 2200

Fast and reliable data transmission up to 9600 bit/s

- ◆ Multistandard HF modem
- ◆ Single-tone modem technology
- ◆ Forward error correction (FEC)
- ◆ Short preamble (Rohde & Schwarz waveforms)
- ◆ Remote control (ASCII code)
- ◆ CW suppression
- ◆ Compact plug-in module
- ◆ Built-in test (BIT)
- ◆ Software available for:
 - R&S® GM 2200S advanced waveforms
 - STANAG 4285
 - MIL-STD-188-110 A, Section 5.3
 - STANAG 4529
 - MIL-STD-188-110 B, App. C/
 - STANAG 4539, Annex B, Section 4



ROHDE & SCHWARZ

The multimode HF Modem R&S®GM 2200 is currently the most advanced serial HF data modem and is fully integrated in the R&S®XK 2000 radio equipment family. This modem can form the backbone of a fast and reliable data transmission system.

Thus large volumes of data such as fax, video still pictures and electronic mail from PC to PC can be sent rapidly anywhere in the world.

wave at high speed (up to 9600 bit/s) in contrast to traditional data transmission techniques such as radioteletype (RTTY) that allow 50 Bd or 100 Bd only.

The modem makes it possible to transmit data economically and reliably via short-

For the R&S®GM 2200, the following modem waveforms are available:

- ◆ R&S®GM 2200S¹⁾ (Rohde & Schwarz advanced waveforms)
- ◆ STANAG 4285
- ◆ MIL-STD-188-110A, Section 5.3
- ◆ STANAG 4529
- ◆ MIL-STD-188-110B, App. C/
STANAG 4539, Annex B, Section 4

All these waveforms can be ordered in any combination, i.e. separately and independently of each other, and activated in the R&S®XK 2000.

The modem waveforms are the basis for reliable and error-free HF data transmission. When used together with an ARQ data link protocol, error-free data flow is ensured.

Waveforms in line with STANAG and MIL-STD such as the new 9600 bit/s high-speed waveform (STANAG 4539, Annex B, Section 4) cannot be used together with the RSX.25 protocol.

For these waveforms, radio protocols such as STANAG 5066 are available on request.

The Message Handling System R&S®PostMan II uses the Rohde & Schwarz 2700 bit/s and 5400 bit/s advanced waveforms (R&S®GM 2200S) in combination with the proprietary ARQ protocol RSX.25.

¹⁾ Interoperable with the earlier corresponding waveforms R&S®GM 2000 and R&S®GM 2100.

Ordering information

Designation	Type	Order number
HF Modem		
Multimode HF modem, plug-in type for R&S®XK 2000 series of equipment; to be ordered together with Software R&S®GM 2200S through R&S®GM 2204S	R&S®GM 2200	6117.5500.02
Software for R&S®GM 2200		
Rohde & Schwarz 2700 bit/s + 5400 bit/s useful data rate (with FEC ²⁾ , autobaud capability but without interleaving) from 900 bit/s to 4500 bit/s; 5400 bit/s with FEC switched off	R&S®GM 2200S	6117.6006.02
MIL-STD-188-110 A Section 5.3 Single Tone useful data rate (with FEC, interleaving) from 75 bit/s to 2400 bit/s; 4800 bit/s with FEC and interleaving switched off	R&S®GM 2201S	6117.6258.02
STANAG 4285 useful data rate (with FEC, interleaving but without autobaud capability) from 75 bit/s to 2400 bit/s; 1200 bit/s, 2400 bit/s and 3600 bit/s even with FEC and interleaving switched off	R&S®GM 2202S	6117.6506.02
STANAG 4529 useful data rate (with FEC, interleaving but without autobaud capability) from 75 bit/s to 1200 bit/s; 600 bit/s, 1200 bit/s and 1800 bit/s even with FEC and interleaving switched off; occupies half the bandwidth of the STANAG 4285 waveform	R&S®GM 2203S	6117.6758.02
MIL-STD-188-110 B Appendix C or STANAG 4539, Annex B, Section 4 useful data rate (with FEC, interleaving capability) from 3200 bit/s to 9600 bit/s; 12800 bit/s with FEC and interleaving switched off	R&S®GM 2204S	6117.7002.02

²⁾ FEC: forward error correction.



More information at
www.rohde-schwarz.com
(search term: GM2200)



ROHDE & SCHWARZ

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