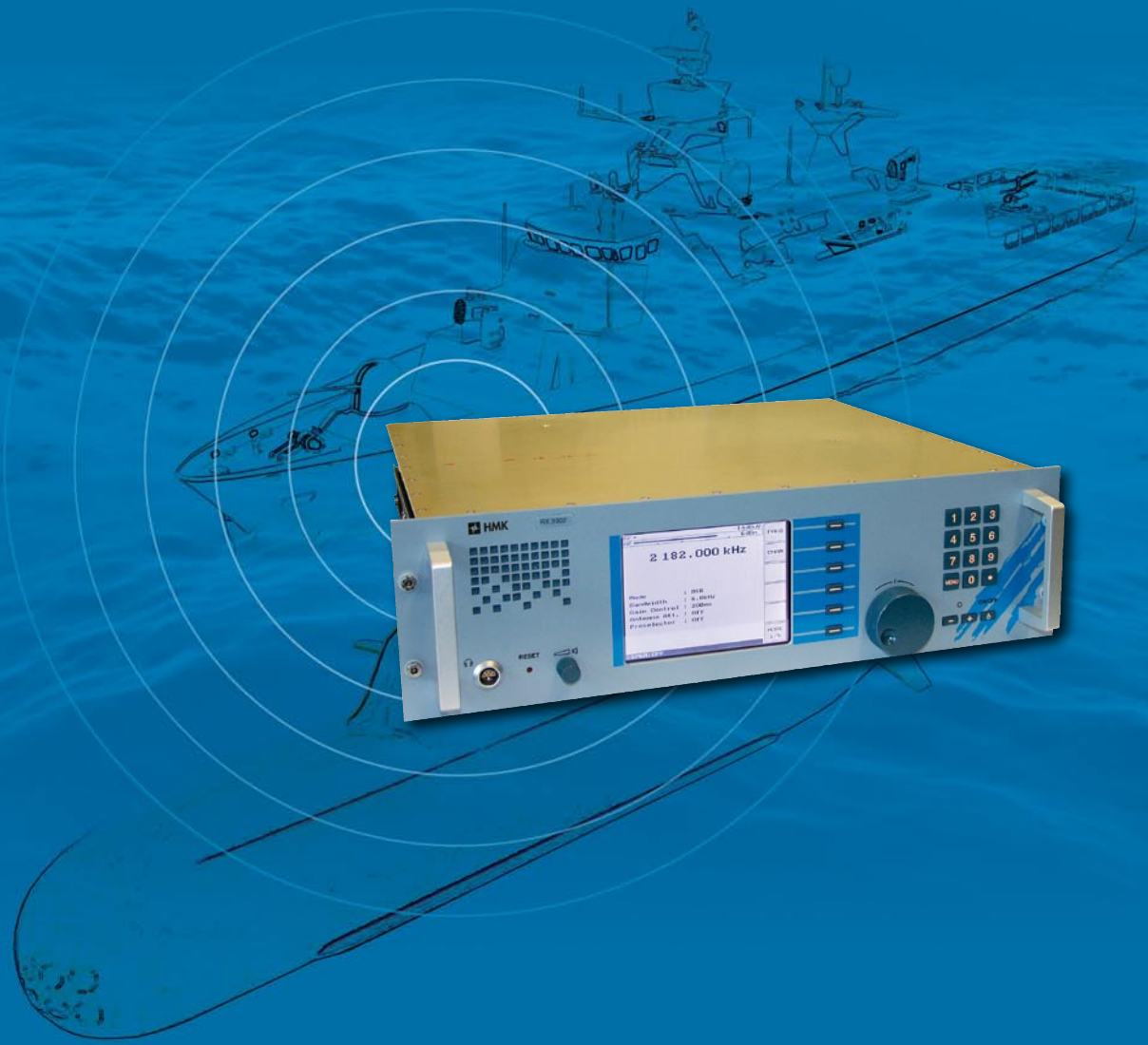


VLF - HF RECEIVER RX 3002



VLF - HF RECEIVER RX 3002

Features

- DSP technology, uploadable firmware
- High resistance against electromagnetic transmissions
- Full remote control capability
- Designed for military applications
- VLF MSK-reception with MSK 1001M
- Comprehensive built-in test
- Optional FH receive mode with ext. controller

General

The RX 3002 receiver is used for communications in the frequency range 10 kHz to 30 MHz, particularly suitable for:

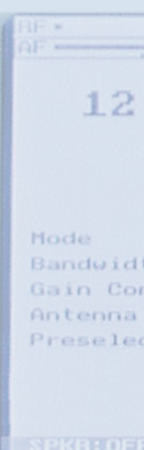
- Operation on board of marine ships of all kinds
- Military and civilian land-based installations
- Mobile stations, e.g. vehicle cabins for special applications
- Stations for border control, police and other security organisations
- Embassy nets
- Stations for international organisations.

The RX 3002 is designed for voice and data reception and contains the complete receiver unit with built-in AC power supply (additional DC input optional) and reserves space for built-in options such as a preselector and / or multi-function data modem.

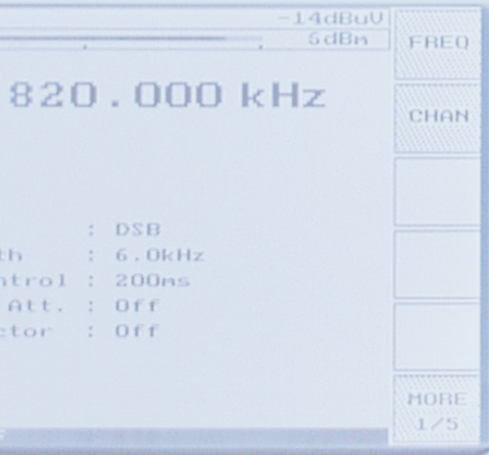
Please note that the individual configuration and implementation of selected options depends on the customer's application.

Technical Data

Frequency range:	10 kHz to 30 MHz
Channel memory:	1000
Frequency stability:	$< 3 \times 10^{-8}$ per day, options on request
Frequency tuning:	In decades from 1 Hz to 10 MHz via keyboard and/or single knob flywheel
Modes of operation:	- DSB (A2A, H2A, A3E) - FSK (F1B analogue/digital) - SSB (J3E USB/LSB, R3E, H3E) - ISB (B9W) - CW (A1A) - DATA (USB/LSB/ISB) - Link 11, Link 22 optional
Passband tuning:	$\pm 50\%$ of selected bandwidth in 10 Hz steps
BFO:	± 5 kHz in 10 Hz steps
Scan functions:	Scan by channel, frequency sweep
IF-Bandwidths:	0.1, 0.15, 0.3, 0.6, 1.5, 2.4, 2.7, 3.2, 3.4, 6.0, 7.0 kHz, others on request
Control interface:	RS 232, RS 422, and RS 422 BusRS 485 1200, 2400, 4800, 9600, 19200, 38400 baud
Sensitivity:	without HF-preselection (10 dB, SINAD with CCITT-Filter) - A3E at $m=0.5$, $B=6$ kHz 40-200 kHz $< 2 \mu\text{V}$ 0.2-30 MHz $< 1.5 \mu\text{V}$ - A1A at $B=300$ Hz 10-40 kHz typ. $0.5 \mu\text{V}$ 0.04-30 MHz $< 0.2 \mu\text{V}$ - J3E at $B=0.3-2.7$ kHz 10-40 kHz typ. $1.5 \mu\text{V}$ 0.04-30 MHz $< 0.5 \mu\text{V}$
Max. antenna input volt. (for 10 min.):	30 V EMF at 10 kHz to 1.5 MHz 100 V EMF at 1.5 MHz to 30 MHz 50 V EMF at 30 MHz to 400 MHz
Intercept point:	(3rd order) > 30 dBm (1-30 MHz)
AGC:	selectable 25, 200, 500, 1000, 3000 ms Output is maintained within 3 dB for a change in input of 134 dB for input levels between 0.2 μV and 1V.
Reference input:	10 MHz, 0 dBm ± 10 dB



VLF - HF RECEIVER RX 3002



General Data

Power supply: 100-264 VAC, 47 to 63 Hz, appr. 50 VA
Optional input: 21 to 32 VDC, floating, appr. 50W

Environmental specifications:

- Operating temperature: -15°C to +55°C
- Humidity: max. 95% up to 40°C
- Shock: acc. to BV 0430, sheet 16 (without shockmounts)
- Vibration: acc. to BV 0440, diagram 1 and 6 (-10dB)
- EMI/EMC: acc. to VG 95373 or MIL-STD-461 C

Dimensions:

- Height: 133 mm (3 U)
- Depth: 426 mm (without handles)
- Width: 485 mm (19")

Weight (without options): approx. 11 kg

Internal Options

Automatic HF-preselector PSI 3000

- tuning time: < 10 ms
- f < 1.5 MHz: low pass filter
- 1.5 - 30 MHz: bandpass filter
- Selectivity: min. 40 dB at 10% frequency deviation

Interface board IB 3000

- BCD frequency output, TTL-level 100 Hz steps

Frequency reference interface FS 3000M

- 1 MHz output for VLF-MSK demod. MSK 1001M

Data link processor DLP 3002 plug-in board for

- Automatic Link Establishment ALE 3002 and/or
- High speed multi-waveform data modem MDM 3002, up to 19200 bps

L11 capability: acc. to MIL-STD-188-203-1A

L22 capability: acc. to STANAG 5522

Crossfox/ Fost mode: receive only

Optional accessories

- Rubidium frequency standard RS 1010 for up to 6 receivers
- 3 U housing KG 3/500
- Headphone
- Windows remote control software



Rubidium frequency standard RS 1010 (Option)



Internal 40 dB Pre/interselector PSI 3000 (Option)

Hagenuk Marinekommunikation GmbH
Phone +49 (4347) 714-101 Fax +49 (4347) 714-110
Hamburger Chaussee 25 24220 Flintbek/Germany
info@hmk.atlas-elektronik.com www.hmk.atlas-elektronik.com

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