

VLF - HF Receiver RX 3002

12.392 090 MHz



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

Technical Data

- Frequency range: 10 kHz to 30 MHz
- Frequency tuning: In decades from 1 Hz to 10 MHz
- Passband tuning:
± 50% of selected bandwidth in 10 Hz steps
- BFO: ± 5 kHz in 10 Hz steps
- Channel memory: 1000
- Scan functions: Scan by channel, frequency sweep
- Frequency stability:
 3×10^{-8} per day, options on request
- Modes of operation:
 - DSB (A2A, H2A, A3E)
 - SSB (J3E USB/LSB, R3E, H3E)
 - ISB (B9W)
 - CW (A1A)
 - L11, L22 optional
- 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 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 µV
0.2-30 MHz < 1.5 µV
 - A1A at B=300 Hz
10-40 kHz typ. 0.5 µV
0.04-30 MHz < 0.2 µV
 - J3E at B=0.3-2.7 kHz
10-40 kHz typ. 1.5 µV
0.04-30 MHz < 0.5 µV
- 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

Hagenuk

Marinekommunikation GmbH

Hamburger Chaussee 25
24220 Flintbek, Germany
Tel. +49 4347 714-101
Fax +49 4347 714-110
Email: naval.hmk@sysde.eads.net
URL: www.eads.net/hmk



RX 3002 rear side

- 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.
- Input for frequency standard: 10 MHz, 0 dBm +/- 10 dB

General Data

- Power supply:
85-265 VAC, 45 to 63 Hz, 65 VA ± 20%
- Environmental specifications:
 - Operating temperature: -15°C to +55°C
 - Humidity: 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
- Physical characteristics:
 - Height: 133 mm (3 HU)
 - Depth: 450 mm (without handles)
 - Width: 485 mm (19")
- Weight: approx. 11 kg

Internal Options

- Automatic HF-preselector PSI 3000
 - tuning time < 5 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
 - Output: 1 MHz for VLF-MSK demod. MSK 1001M
- L11 capability acc. to MIL-STD-188-203-1A
- L22 capability acc. to STANAG 5522
- Crossfox/ Fost mode
- DC-supply: 21 to 32 V floating, appr. 50W

Optional accessories

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