

# SOVERON® HR HANDHELD TACTICAL RADIO FOR THE DISMOUNTED SOLDIER

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True independence is a choice

The R&S®HR5000 handheld tactical radio is a member of the SOVERON® software defined radio family.

The R&S®HR5000 is a multiband handheld radio system that supports up to two voice channels and IP data transmission in parallel. It has been designed for use by dismounted soldiers under harsh field conditions. Its ruggedized hardware surpasses MIL-STD environmental and EMC requirements.

Together with the SOVERON®VR vehicular radio, the SOVERON®HR handheld tactical radio forms a seamless connection to the higher echelons on the battlefield to provide a common operational picture. Both radios are connected via the SOVERON®WAVE TNW tactical networking waveform, a frequency hopping waveform capable of voice and data transmission in parallel. The R&S®HR5000 features an easy-to-use HMI with an interface to external devices, allowing the use of military applications on the move.

As an IP-based waveform, the SOVERON®WAVE TNW can be easily and flexibly integrated into IP-based soldier radio systems, smartphones and vehicles. For dismounted deployed forces, low size, weight and power consumption (SWAP) as well as high power efficiency and a high-capacity battery are essential. The R&S®HR5000 combines all these features. It increases the autonomy of dismounted soldiers by providing reliable communications over a distance of up to 7 km, high battery autonomy time and secure communications to their leaders and support forces.

## Key facts

- ▶ Two parallel voice channels with IP-based data transmission
- ▶ Frequency range from 30 MHz to 512 MHz without gaps
- ▶ Up to 7 km direct coverage, extendable by using MANET
- ▶ Ad-hoc networking (MANET) capability
- ▶ Frequency hopping (TRANSEC)
- ▶ AES encryption (COMSEC)
- ▶ Embedded GPS receiver
- ▶ Robust for military use in harsh field conditions – ready to support ESSOR handheld specific narrowband waveform



Product Flyer | Version 03.00

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# SPECIFICATIONS IN BRIEF

## Size, weight and power (SWAP)

- ▶ Battery autonomy: > 12 h
- ▶ Weight (incl. battery): ≤ 1.2 kg (2.65 lb)
- ▶ Dimensions, incl. battery (W × H × D):  
≤ 80 mm × 219 mm × 42 mm  
(3.15 in × 8.62 in × 1.66 in)

## Distance coverage

- ▶ Up to 7 km direct coverage  
extendable by using MANET

## Frequency range

- ▶ 30 MHz to 512 MHz without frequency gaps

## Transmit output power

- ▶ High: 5 W
- ▶ Medium: 2 W
- ▶ Low: 0.2 W

## Temperature range

- ▶ Storing: -40 °C to +71 °C
- ▶ Operating: -30 °C to +60 °C

## Environmental specifications

- ▶ In line with MIL-STD-810G

## Electromagnetic specifications

- ▶ In line with MIL-STD-461G

## GPS

- ▶ Embedded

## Waveforms

- ▶ Fixed frequency
- ▶ SOVERON® WAVE TNW

For information on further waveforms, please contact your local Rohde & Schwarz sales office.

## SOVERON® WAVE TNW features

- ▶ German engineering for backdoor-free encryption using 256-bit AES (COMSEC)
- ▶ High data rate for two parallel voice channels with IP-based data transmission
- ▶ Anti-jam (AJ) frequency hopping (TRANSEC)
- ▶ Optimized for use by dismounted soldiers in hilly and urban terrain (multipath robustness)
- ▶ Ad-hoc networking (MANET) for increased range and interoperability

## Accessories

- ▶ Battery packs and chargers
- ▶ VHF/UHF antennas
- ▶ Mission preparation tools and fill device
- ▶ Headsets
- ▶ Speaker-microphones
- ▶ Vehicular docking stations
- ▶ Tooling for mission preparation

