

# R&S®HF918 HIGH-GAIN SHF ANTENNA

800 MHz to 18 GHz

For broadband transmission and reception



The R&S®HF918 high-gain SHF antenna provides broadband transmission and reception in the frequency range from 800 MHz to 18 GHz.

Thanks to its outstanding power rating and matching (VSWR), it can also be used in transmission applications.

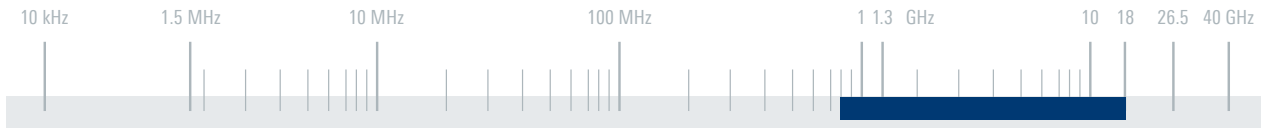
The sturdy design as well as the low weight of this antenna ensure easy handling and make it ideal for use in monitoring applications under severe outdoor conditions.

The high gain up to 18 GHz allows the reception and analysis of weak signals.

## Key facts

- ▶ Wide frequency range
- ▶ High gain, optimum beamwidth for good emitter locating
- ▶ Stable radiation patterns over entire frequency range
- ▶ Very low cross-polarization
- ▶ Compact size, low weight
- ▶ Outstanding power ratings up to 18 GHz





### Specifications

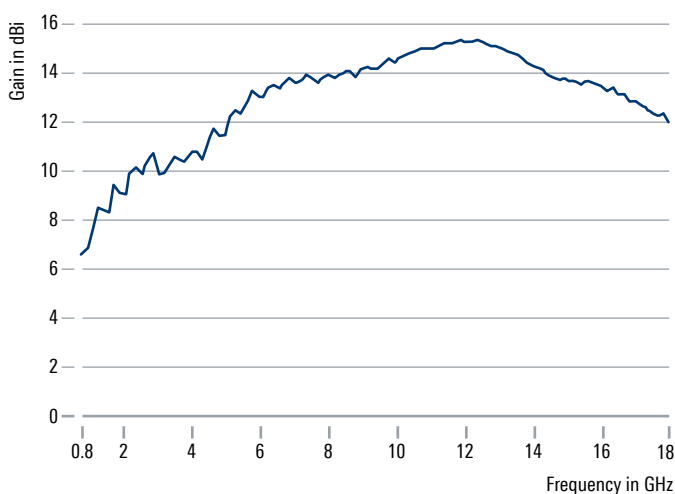
|  |                     |  |
|--|---------------------|--|
| Frequency range  |                     | 800 MHz to 18 GHz                      |
| Polarization   |                     | linear                                 |
| Nominal impedance  |                     | 50 Ω                                   |
| VSWR   |                     | < 2 (typ.) (see diagram)               |
| Gain   |                     | see diagram                            |
| Cross-polarization   |                     | < -25 dB; -30 dB (typ.)                |
| Maximum input power<br>(at sea level, +40°C ambient temperature) | 800 MHz             | 300 W (CW)                             |
|  | 5 GHz               | 190 W (CW)                             |
|  | 10 GHz              | 130 W (CW)                             |
|  | 18 GHz              | 100 W (CW)                             |
| RF connector   |                     | N female                               |
| MTBF   |                     | > 100 000 h                            |
| Protection class   |                     | IP55, in line with EN 60529            |
| Operating temperature range                                      |                     | -30°C to +55°C                         |
| Maximum wind speed   | without ice deposit | 275 km/h                               |
| Dimensions   | Ø × L               | approx. 0.41 m × 0.3 m (16 in × 12 in) |
| Weight   |                     | approx. 5.5 kg (12 lb)                 |

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### Ordering information

| Ordering information                                    | Type        | Order No.    |
|---|-------------|--------------|
| High-gain SHF antenna,<br>color: silver gray (RAL 7001) | R&S®HF918   | 4201.1008.02 |
| <b>Recommended extras</b>                               |             |              |
| Wooden tripod   | R&S®HZ-1    | 0837.2310.02 |
| Adapter for R&S®HZ-1                                    | R&S®HL025Z1 | 4053.4006.03 |

### Typical gain



### Typical VSWR

