## VHF/UHF Antennas

VHF/UHF Coaxial Dipole R\&S ${ }^{\oplus}$ HK033


80 MHz to 2 GHz
Extremely broadband vertical coaxial dipole especially for use on ships

## Features

- Wide frequency range
- Protection against lightning strokes
- Very low wind load
- Rugged mechanical design
- Low weight
- Ideal for aeronautical radio and monitoring applications


Brief description
The VHF/UHF Coaxial Dipole R\&S ${ }^{\oplus}$ HK 033 is a very broadband omnidirectional antenna for vertically polarized signals.

It features a vertical radiation pattern with null fill-in and high suppression of skin currents.

Its rugged design, its low wind load and its integrated lightning protection circuit make the R\&S $\odot$ HK 033 ideal for use on ships.

## Specifications

| Frequency range | 80 MHz to 2000 MHz |
| :--- | :--- |
| Polarization | linear/vertical |
| Input impedance | $50 \Omega$ |
| VSWR | typ. $<2.4$ |
| Max. input power |  |
| Up to 100 MHz | $860 \mathrm{WCW}+100 \%$ AM |
| Up to 400 MHz | $430 \mathrm{WCW}+100 \%$ AM |
| Up to 600 MHz | $360 \mathrm{WCW}+100 \% \mathrm{AM}$ |
| Up to 1000 MHz | $270 \mathrm{WCW}+100 \% \mathrm{AM}$ |
| From 1300 MHz | $240 \mathrm{WCW}+100 \% \mathrm{AM}$ |
| Gain | typ. 2 dBi |


| Horizontal |  |
| :--- | :--- |
| radiation pattern | omnidirectional |
| Connector | N female |
| MTBF | 1000000 h |
| Operating |  |
| temperature range | $-40^{\circ} \mathrm{C} \mathrm{to}+85^{\circ} \mathrm{C}$ |
| Max. wind speed | $160 \mathrm{~km} / \mathrm{h} \mathrm{(without} \mathrm{ice} \mathrm{deposit)}$ |
| Dimensions |  |
| (diameter $\times$ height) | approx. $310 \mathrm{~mm} \times 1250 \mathrm{~mm}$ |
| Weight | approx. 6 kg |

Ordering information
Recommended extras
Diplexer for the ranges
100 MHz to $162 \mathrm{MHz} /$

| 225 MHz to 400 MHz | R\&S ${ }^{\oplus}$ FT224 | 0525.5117 .03 |
| :--- | :--- | :--- |
| Mast, 6 m, pluggable | R\&S ${ }^{\oplus}$ KM011 | 0273.9116 .02 |
| Mast Adapter | R\&S ${ }^{\text {K KM011Z2 }}$ | 4022.3608 .02 |




## Typical USWR and gain

Typical horizontal (top) and vertical (bottom) radiation pattern

