## R&S®HK061 VEHICULAR BROADBAND COMMUNICATIONS ANTENNA

30 MHz to 600 MHz

Compact transmitting/receiving antenna specially designed for operation on vehicles



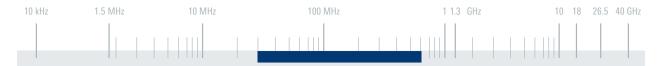
The R&S®HK061 vehicular broadband communications antenna is designed for mobile and semi-stationary communications tasks.

The antenna elements are integrated in a highly ruggedized radome (weather resistant and oak beam test proved) and are connected to the antenna base via a spring element with a tilt and erect function.

The antenna is installed using a four-hole NATO flange, which provides for easy integration in numerous existing systems.

## **Key facts**

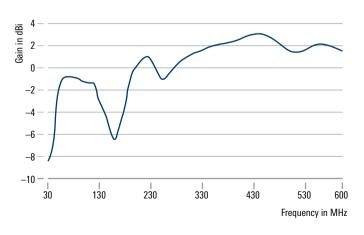
- ► Extremely wide frequency range
- ▶ Inconspicuous design, favorable form factor
- ▶ High efficiency
- Excellent radiation characteristics
- ► For use in harsh environments
- ▶ Wide operating temperature range
- ▶ Version with integrated GPS antenna available



| Specifications                              |                      |                             |
|---|----------------------|-----------------------------|
| Frequency range                             |                      | 30 MHz to 600 MHz           |
| Connector                                   |                      | N female, 50 $\Omega$       |
| VSWR (measured on a 3 m × 3 m ground plane) |                      | < 3.0 (typ.)                |
| Gain  |                      | see diagram                 |
| Azimuth pattern                             |                      | omnidirectional             |
| Maximum deviation from circularity          |                      | ±1 dB                       |
| Elevation pattern                           | < 170 MHz            | monopole-like               |
|   | > 170 MHz            | dipole-like                 |
| Input power                                 | up to +50°C          | max. 100 W (CW)             |
|   | at +71 °C            | max. 50 W (CW)              |
| Protection class                            |                      | IP67, in line with EN 60529 |
| Operating temperature range                 |                      | -40°C to +71°C              |
| Dimensions                                  | length               | approx. 2.2 m (7 ft)        |
|   | radome diameter      | approx. 40 mm (2 in)        |
|   | flange diameter      | approx. 140 mm (6 in)       |
| Weight                                      | models .03, .04, .05 | approx. 9 kg (20 lb)        |
|   | model .13, .14, .15  | approx. 10 kg (22 lb)       |

| Ordering information  | Туре      | Order No.    |
|---|-----------|--------------|
| Vehicular broadband communications antenna                    | R&S®HK061 |              |
| Color: bronze green (RAL 6031F9)                              |           | 4076.0007.05 |
| Color: sand yellow (RAL 1002)                                 |           | 4076.0007.03 |
| Color: squirrel gray (RAL 7000)                               |           | 4076.0007.04 |
| With integrated GPS antenna, color: sand yellow (RAL 1002)    |           | 4076.0007.13 |
| With integrated GPS antenna, color: squirrel gray (RAL 7000)  |           | 4076.0007.14 |
| With integrated GPS antenna, color: bronze-green (RAL 6031F9) |           | 4076.0007.15 |

## Typical gain (measured on a $3 \text{ m} \times 3 \text{ m}$ ground plane in horizontal direction)



## Typical patterns at 200 MHz (measured on a 3 m × 3 m ground plane)

