

# R&S®HL046E

## High Gain Log-Periodic Antenna

80 MHz to 3 GHz

Log-periodic antenna for EMS measurements



The R&S®HL046E high gain log-periodic antenna offers excellent broadband characteristics, a radiation pattern that is approximately rotation-symmetrical and high gain, making it particularly suitable for EMS immunity measurements.

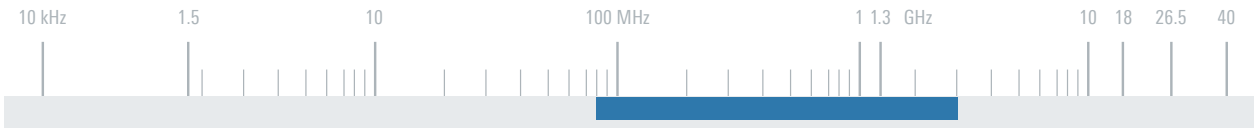
The high antenna gain means that in comparison with existing systems, the required field strengths can be achieved with a lower amplifier power.

Its small size, wide frequency range and folding mechanism make the antenna ideal for use in test chambers.

### Key facts

- High antenna gain, i.e. low amplifier power required
- No change of antennas needed over wide frequency range
- Uniform object irradiation due to optimized radiation patterns
- Small size
- Influence of chamber reduced
- Antenna gain approximately constant over the whole frequency range
- Wall mounting possible





| Specifications              |  |
|-----------------------------|--|
| Frequency range             | 80 MHz to 3 GHz                          |
| Polarization                | linear                                   |
| Input impedance             | 50 Ω                                     |
| VSWR                        |  |
| < 2500 MHz                  | < 2                                      |
| ≥ 2500 MHz                  | < 2.5                                    |
| Practical gain              | typ. > 8 dBi                             |
| Max. input power            |  |
| 80 MHz                      | 1400 W + 100% AM                         |
| 500 MHz                     | 600 W + 100% AM                          |
| 1000 MHz                    | 400 W + 100% AM                          |
| 2000 MHz                    | 300 W + 100% AM                          |
| 3000 MHz                    | 250 W + 100% AM                          |
| Connector                   | N female                                 |
| Operating temperature range | +5°C to +40°C, in line with MIL-STD-810E |

|                        |  |
|------------------------|--|
| Class of application   | laboratory   |
| Dimensions (W × H × L) |  |
| Without trolley        |  |
| Folded                 | approx. 0.85 m × 1.50 m × 1.81 m (34 in × 59 in × 71 in)   |
| Open                   | approx. 1.50 m × 1.50 m × 1.81 m (59 in × 59 in × 71 in)   |
| With trolley           |  |
| Folded                 | approx. 0.86 m × 1.90 m × 1.89 m (34 in × 75 in × 74 in)   |
| Open                   | approx. 1.50 m × 1.90 m (variable up to 2.60 m) × 1.89 m (59 in × 75 in (variable up to 102 in) × 74 in) |
| Weight                 |  |
| Without trolley        | approx. 17 kg (38 lb)  |
| With trolley           | approx. 29.5 kg (60 lb)  |

| Ordering information                          | Type        | Order No.    |
|---|-------------|--------------|
| High Gain Log-Periodic Antenna (with trolley) | R&S®HL046E  | 4065.5960.02 |
| <b>Recommended extras</b>                     |             |              |
| Pneumatic Polarization Control                | R&S®HL046-P | 4053.1694.02 |

