

SHF Antennas

SHF Directional Antenna

R&S® AC 308R2



18 GHz to 26.5 GHz

**Broadband directional antenna for
radiomonitoring**

Features

- ◆ Fast and simple installation
- ◆ Rugged design
- ◆ Integrated in operational concept of SHF Directional Antenna Systems R&S® AC090 to R&S® AC300



Brief description

The SHF Directional Antenna R&S® AC308R2 for the frequency range 18 GHz to 26.5 GHz has a reflector diameter of 25 cm.

The antenna is supplied with an integrated preamplifier (model .02) or without preamplifier (model .04).

The R&S® AC308R2 is especially suitable for extending the frequency range of the SHF Directional Antenna Systems R&S® AC090 to R&S® AC300 to which it can be flange-connected.

The R&S® AC308R2 with optional tripod, adapter and power supply can also be used independently.



Specifications

Antenna

| | |
|----------------------|--|
| Frequency range | 18 GHz to 26.5 GHz |
| Polarization | H, V or 45°, depending on installation |
| Input impedance | 50 Ω |
| VSWR | <2 |
| Gain | 29 dBi to 33 dBi |
| Half-power beamwidth | 4.5° to 3° |
| Reflector diameter | 250 mm |
| Connector | K female |

Preamplifier (typical values)

| | |
|------------------------|----------|
| Gain | 28 ±2 dB |
| 1 dB compression point | ≥+8 dBm |

| | |
|--------------------------------|-------------------------|
| Noise figure | <3 dB |
| Power consumption | +15 V/0.2 A |
| MTBF | |
| Model .04 (passive) | >250 000 h |
| Model .02 (active) | >100 000 h |
| Operating temperature range | -20 °C to +50 °C |
| Dimensions (diameter × length) | approx. 380 mm × 300 mm |
| Weight | approx. 2.5 kg |

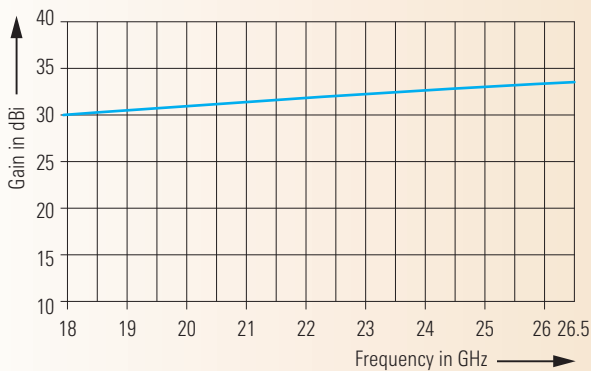
Ordering information

SHF Directional Antenna

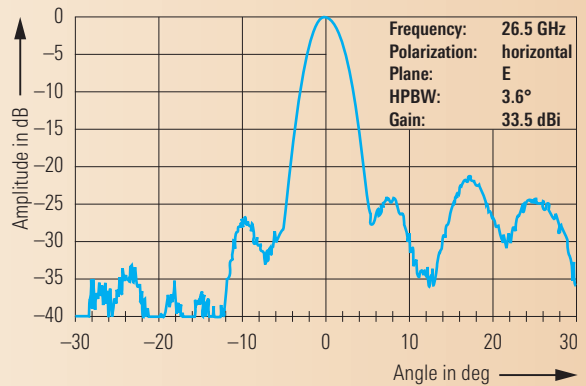
| | | |
|-----------------------|---------------|--------------|
| With preamplifier, | | |
| 18 GHz to 26.5 GHz | R&S® AC 308R2 | 4051.6001.02 |
| Without preamplifier, | | |
| 18 GHz to 26.5 GHz | R&S® AC 308R2 | 4051.6001.04 |

Recommended extras

| | | |
|------------------|---------------|--------------|
| Power Supply | R&S® IN 308 | 4059.6752.02 |
| Transit Case | R&S® AC 308Z | 4059.6500.02 |
| Adapter for | | |
| Tripod R&S® HZ-1 | R&S® KA 308R2 | 4057.8606.00 |
| Tripod | R&S® HZ-1 | 0837.2310.02 |



Typical gain



Typical radiation pattern at 26.5 GHz