

R&S®AC008 Microwave Directional Antenna

1 GHz to 18 GHz/0.85 GHz to 26.5 GHz

Manually or automatically adjustable directional antenna for the detection of RF signals and for field strength measurements



The R&S®AC008 is a manually adjustable directional antenna for mobile applications.

When used with the R&S®RD016 antenna rotator and the R&S®GB016 control unit, the R&S®AC008 can also be automatically positioned in azimuth and elevation.

The reflector has a diameter of 0.9 m and – depending on the feed used – receives signals in the range from 1 GHz to 18 GHz or from 0.85 GHz to 26.5 GHz.

The R&S®AC008 is used for detecting radio signals and for field strength measurements. It can also be directed toward geostationary satellites.

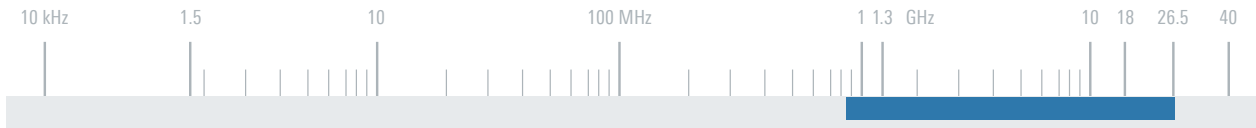
The use of different feeds allows reception of any type of polarization. For transportation, the directional antenna (including the feed) can be collapsed to a handy size.

Key facts

- Wide frequency range
- Reception of linear, dual-linear and circular polarization (depending on feed used)
- Collapsible for easy transport
- Use of active feeds to compensate cable loss possible



R&S®AC008 with R&S®RD016 antenna rotator and R&S®GB016 control unit.



Specifications

Frequency range	1 GHz to 18 GHz (models .02/.04), 0.85 GHz to 26.5 GHz (model .05)
Polarization with feed	
R&S®HL024A1	dual-linear (model .02)
R&S®HL050	linear (model .05)
R&S®HL024S2	linear/circular (model .04)
Input impedance	50 Ω
VSWR	depending on feed
Gain	15 dBi to 40 dBi (1 GHz to 18 GHz)

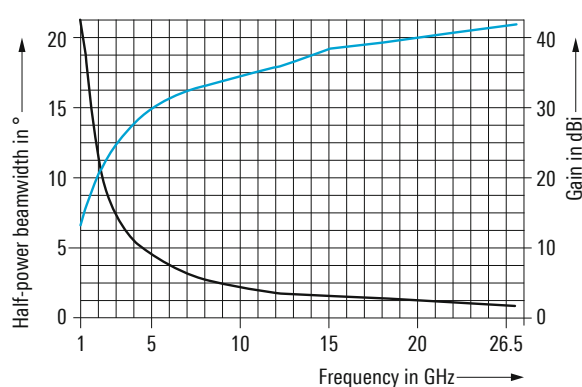
Half-power beamwidth	19° to 1.1° (1 GHz to 18 GHz)
Positioning range	
Azimuth	360°
Elevation	-6° to +44°
Connector	SMA female
MTBF	> 100 000 h
Operating temperature range	-30°C to +50°C
Reflector diameter	approx. 0.9 m (35 in)
Weight	approx. 12 kg (27 lb)

3

Ordering information

Ordering information	Type	Order No.
Microwave Directional Antenna	R&S®AC008	
1 GHz to 18 GHz, dual-linear polarization		0671.5017.02
1 GHz to 18 GHz, linear/circular polarization		0671.5017.04
0.85 GHz to 26.5 GHz, linear polarization		0671.5017.05
Recommended extras		
Tripod	R&S®AC008-Z	0671.5117.02
Control Unit	R&S®GB016	4056.7006.03
Control Cable, length: 10 m	R&S®GB016Z1	4056.7270.02
Microwave Cable, length: 5 m	R&S®AC008W2	0751.6931.04
Microwave Cable, length: 10 m	R&S®AC008W2	0751.6931.05
Telescope	R&S®AC008F1	0751.6919.02
Antenna Rotator	R&S®RD016	4077.9008.02
Control Cable, between R&S®GB016 and R&S®RD016, length: 10 m	R&S®GK016K1	4077.9150.00
High-Resolution Elevation Adjustment Upgrade Kit	R&S®AC008-AZ	4061.2173.00

Typical gain (blue) and half-power beamwidth (black) of R&S®AC008 with R&S®HL050 feed



R&S®AC008 with
R&S®AC008-AZ
high-resolution
elevation adjustment
upgrade kit.