

R&S®HE800-DC30 HANDHELD DIRECTIONAL ANTENNA WITH DOWNCONVERTER

18 GHz to 33 GHz

For locating transmitters and interference sources

New



The R&S®HE800-DC30 handheld directional antenna with downconverter extends the operating frequency range of the R&S®PR200 portable monitoring receiver to the 18 GHz to 33 GHz range. The antenna is used together with the R&S®PR200 to locate transmitters and interference sources. Bearings are found by manually pointing the antenna in the direction where the signal is strongest.

The antenna consists of an antenna handle with a downconverter, a fixed antenna module behind the foam radome and an RF and supply cable to the receiver.

The integrated downconverter separates the frequency range from 18 GHz to 33 GHz into four bands. For continuous operation, the downconverter is fully controlled by the R&S®PR200 portable monitoring receiver.

A built-in low-noise amplifier (LNA) can be activated to increase system sensitivity. In passive mode, the amplifier is bypassed and the antenna can also be used in the vicinity of strong transmitters.

The integrated electronic compass delivers exact azimuth and elevation data. Together with the sensitive GNSS receiver in the antenna handle, precise location accuracy is provided by triangulation.

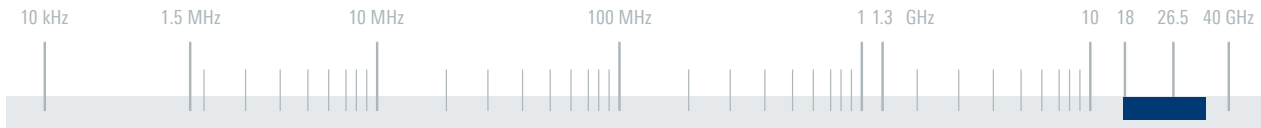
The integrated trigger button externally triggers a receiver-configurable action.

Key facts

- ▶ Distinct directional pattern
- ▶ Wide dynamic range due to switchable active and passive mode (LNA on/off)
- ▶ Integrated switchable LNA to increase system sensitivity
- ▶ Very wide frequency range in a compact format
- ▶ Trigger button to externally trigger the receiver
- ▶ Fatigue-free operation due to antenna design and materials used, which keep weight to a minimum
- ▶ GNSS receiver and electronic compass included
- ▶ Tripod thread and adapter thread for smartphone/tablet cradle
- ▶ Exchangeable cable set between antenna and receiver



R&S®HE800-DC30



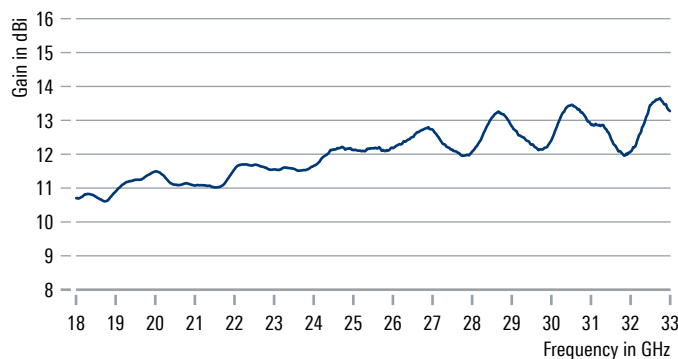
Specifications

Frequency range	18 GHz to 33 GHz	
Nominal impedance	50 Ω	
Output VSWR (cable set included)	< 3.0, < 2.0 (typ.)	
Polarization	linear	
Gain	see diagram	
Output IP3	0 dBm (typ.)	
Output 1 dB CP	-15 dBm (typ.)	
Input 1 dB CP	bypass mode	145 dB(μV/m) (typ.)
	LNA mode	125 dB(μV/m) (typ.)
MTBF	250 000 h	
Connector	RF output	SnapN male
Operating temperature range	-10 °C to +55 °C	
Dimensions	L × H × D	approx. 293 × 252 × 70 mm (11.54 in × 9.92 in × 2.76 in)
Weight	approx. 1.2 kg (2.65 lb)	

Ordering information

Ordering information	Type	Order No.
Handheld directional antenna with downconverter	R&S®HE800-DC30	4115.6006.03
Recommended extras		
Transport case, for R&S®HE800	R&S®HE800Z1	4115.7660.02
Tripod, for R&S®HE400 antenna family	R&S®HE400Z4	4104.9109.02

Measured realized gain of the R&S®HE800-DC30



Measured field patterns of the R&S®HE800-DC30

