

R&S®HE800-PA HANDHELD DIRECTIONAL ANTENNA WITH PREAMPLIFIER

18 GHz to 44 GHz

For locating transmitters and interference sources



The R&S®HE800-PA handheld directional antenna with preamplifier is designated for locating transmitters and interference sources in the very wide frequency range from 18 GHz to 44 GHz. Bearings are found by manually pointing the antenna in the direction where the signal is strongest.

The antenna is optimized to be used with the R&S®Spectrum Rider FPH handheld spectrum analyzer (.44/.54 models) as well as suitable third-party handheld analyzers and receivers.

The compatibility with handheld analyzers and receivers in the microwave range makes the antenna ideal for applications in this frequency range, such as interference hunting in 5G mobile networks.

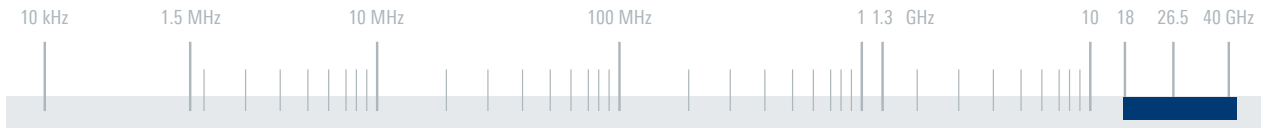
The R&S®HE800-PA consists of an antenna handle, a fixed antenna module behind the foam radome and an RF and supply cable to the analyzer.

A low-noise amplifier (LNA) is built in to increase system sensitivity.

Key facts

- ▶ Unambiguous direction finding thanks to distinct directional pattern
- ▶ Wide dynamic range
- ▶ Extremely wide frequency range in a compact size
- ▶ Fatigue-free operation due to antenna design and materials used, which keep weight to a minimum
- ▶ Can be mounted on a tripod (1/4" tripod thread)
- ▶ Adapter thread for a smartphone holder, tablet holder or mechanical compass
- ▶ Exchangeable cable set





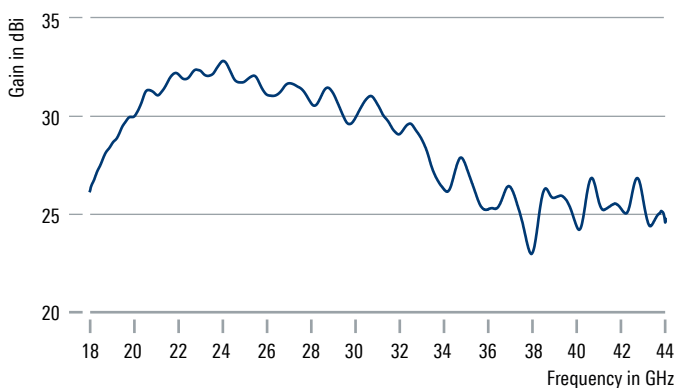
Specifications

Frequency range		18 GHz to 44 GHz
Nominal impedance		50 Ω
Output VSWR		< 2.0
Polarization		linear
Gain		see diagram
Output IP3	18 GHz to 40 GHz	20 dBm (typ.)
Output 1 dB compression point		10 dBm (typ.)
Input 1 dB compression point		130 dBμV/m (typ.)
Destructive field strength		> 10 V/m
MTBF		> 100000 h
Connector (RF output)		2.92 mm female
Connector (power supply)		USB type A plug
Operating temperature range		-10°C to +55°C
Dimensions	L × H × D	approx. 283 mm × 179 mm × 70 mm (11 in × 7 in × 3 in)
Weight		approx. 0.6 kg (1 lb)

Ordering information

Ordering information	Type	Order No.
Handheld directional antenna with preamplifier	R&S®HE800-PA	4115.6006.02
Recommended extras		
Transport case, for R&S®HE800-PA	R&S®HE800Z1	4115.7660.02
Tripod, for R&S®HE400 antenna family	R&S®HE400Z4	4104.9109.02
R&S®Spectrum Rider FPH handheld spectrum analyzer, 5 kHz to 44 GHz	R&S®FPH	1321.1711.44
R&S®Spectrum Rider FPH handheld spectrum analyzer, 5 kHz to 44 GHz, with tracking generator	R&S®FPH	1321.1711.54

Measured realized gain



Measured field patterns

