

# R&S®HE400BC BASIC HANDHELD DIRECTIONAL ANTENNA

8 kHz to 20 GHz

For locating transmitters and interference sources



The R&S®HE400BC basic handheld directional antenna is used to locate transmitters and interference sources. 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®PR200 portable monitoring receiver, the R&S®PR100 portable receiver or the R&S®FSH and the R&S®Spectrum Rider FPH handheld spectrum analyzers as well as R&S®Cable Rider ZPH cable and antenna analyzer.

It consists of an antenna handle, a receiver-customized cable set and different antenna modules that can easily be attached using a locking ring. Five different antenna modules are available, allowing the reception of vertically or horizontally polarized signals.

The R&S®HE400BC is fully passive, offers lowest insertion loss and uses a manual compass. The antenna handle has no LNA, so no power supply is required.

The antenna handle offers a cost effective solution for Rohde&Schwarz receivers and analyzers as well as third-party receivers.

## Key facts

- ▶ Distinct directional pattern
- ▶ Very wide frequency range in a compact size
- ▶ Fatigue-free operation due to antenna design and materials used, which keep weight to a minimum
- ▶ Tripod thread and adapter thread for smartphone/tablet cradle
- ▶ Exchangeable cable set between antenna and receiver



R&S®HE400HF



R&S®HE400SHF



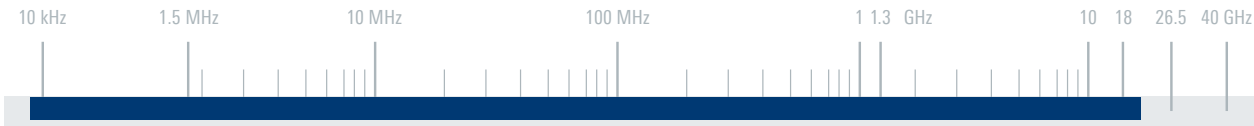
R&S®HE400UWB



R&S®HE400LP



R&S®HE400VHF



**Specifications**

**RF specification of antenna handle**

Frequency range	8 kHz to 20 GHz
Nominal impedance	50 Ω
VSWR	< 2.0; 1.5 (typ.)

**RF specification of antenna modules**

Frequency range	▶ R&S®HE400HF	▶ 8 kHz to 30 MHz
	▶ R&S®HE400VHF	▶ 20 MHz to 200 MHz
	▶ R&S®HE400UWB	▶ 30 MHz to 6 GHz
	▶ R&S®HE400LP	▶ 450 MHz to 8 GHz
	▶ R&S®HE400SHF	▶ 5 GHz to 20 GHz
Polarization		adjustable, linear horizontal or vertical
Nominal impedance		50 Ω
VSWR		< 3.5; 2.0 (typ.) except R&S®HE400HF module
Dimensions	with R&S®HE400UWB antenna module	approx. 600 mm × 285 mm × 60 mm (24 in × 11 in × 2 in)
Weight		approx. 1.0 kg (2 lb)

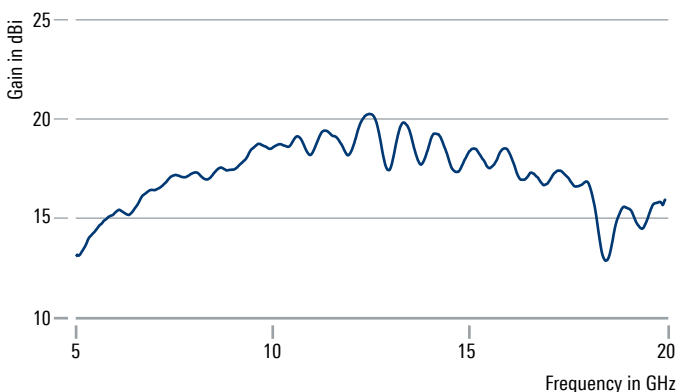
**Ordering information**

Ordering information	Type	Order No.
Basic handheld directional antenna (antenna handle)	R&S®HE400BC	4104.6000.04
HF antenna module, 8.3 kHz to 30 MHz	R&S®HE400HF	4104.8002.02
VHF antenna module, 20 MHz to 200 MHz	R&S®HE400VHF	4104.8202.02
UWB antenna module, 30 MHz to 6 GHz	R&S®HE400UWB	4104.6900.02
Log-periodic antenna module, 450 MHz to 8 GHz	R&S®HE400LP	4104.8402.02
SHF antenna module, 5 GHz to 20 GHz	R&S®HE400SHF	4104.8602.02
RF cable, for connecting R&S®HE400BC to R&S®PR200/R&S®PR100/FSH/FPH/ZPH or third-party receivers	R&S®HE400-KB	4104.7770.04

**Recommended extras**

Transport bags/cases are available for different configurations.		
Tripod, for R&S®HE400 antenna family	R&S®HE400Z4	4104.9109.02

**Measured realized gain of the R&S®HE400SHF**



**Measured field patterns of the R&S®HE400SHF in the H plane**

