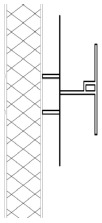
BASE STATION ANTENNA

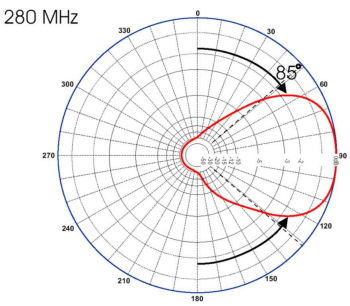
BSG 400 UHF

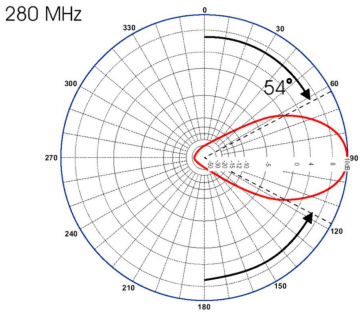
The wideband dipole type antenna with reflector forming radiation pattern. The antenna is produced in version covering the whole UHF air band. In common-phase antenna arrays the BSG 150 enables form horizontal radiation pattern in the range 140 – 360 degrees. An aluminium welded construction is covered with a powder varnish ensuring resistance to climatic conditions. The cover of dipole is made of fiberglass laminate. A handle on a back side of antenna enables easy mounting direct at mast as a single antenna or in antenna arrays using toehold. Considering a high emission power the antenna is recommended to application in broadcasting centers. The BSG UHF (220-400 MHz) enables create omniderectional or directional ACC FIS air communication systems. Folded-out construction optimizes costs of transport and storing. The antenna is also produced in version with anti-freezing system.

ELECTRICAL	
Gain (ref. to λ/2 dipole)	8,5 dB
Radiation pattern	Directional
Impedance	50 Ω
Antenna type	panel
Maximum power	300 W
VSWR	<1,5
Frequency range	220-400 MHz
Bandwidth	180 MHz @ SWR <1,5
Horizontal radiation pattern code (H-plane)	043EB10 (CEPT Recommendation T/R 25-08)
Vertical radiation pattern code (E-plane)	027EB10 (CEPT Recommendation T/R 25-08)
MECHANICAL	
Connector	N, 7/16
Material	Aluminium welded, fiberglass laminate
Polarization	vertical, horizontal
Diameter of mounting mast	150 - 480 mm
Weight	7 ,5 kg
Lightning protection	DC-grounded
Radiator dimensions	1200x 700 mm
Warranty period	48 months
Packaging	Carton box, wrap
Wind speed	180 km/h
MTBF	>250 000 h
CLIMATIC CONDITIONS	
Temperature range	-40°C ÷ +85°C
Humidity	≤ 100% at +40°C

Configurations of BSG UHF series antennas

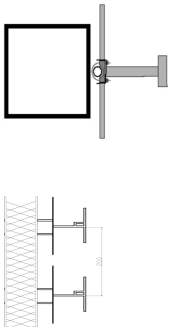


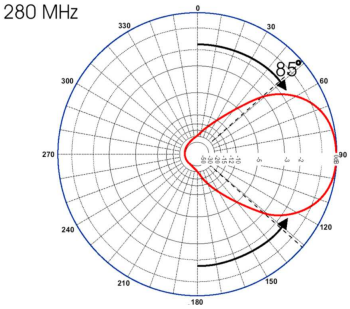


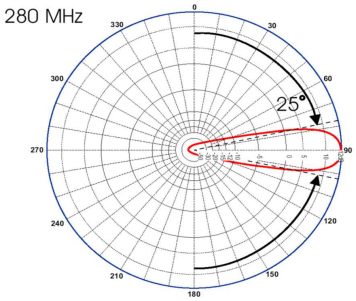


Configuration of antenna system horizontal radiation pattern vertical radiation pattern

1. Gain in vertical plane 8,5 dB, radiation pattern H 85°, E 54°

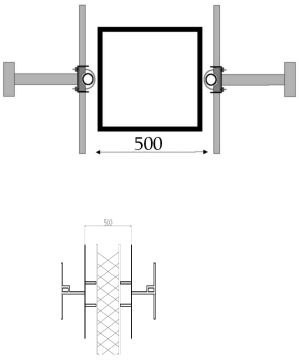


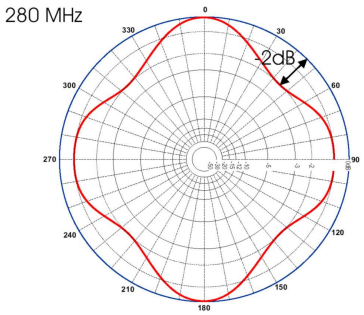


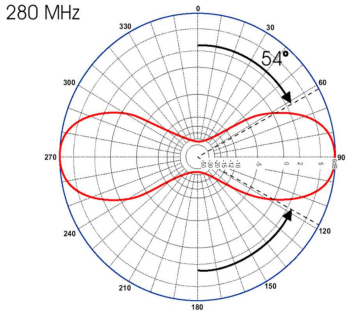


Configuration of antenna system horizontal radiation pattern vertical radiation pattern

2. Gain in vertical plane 11 dB, radiation pattern H 85°, E 25°

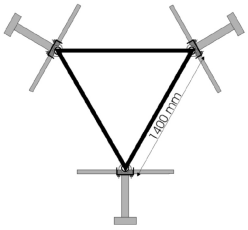


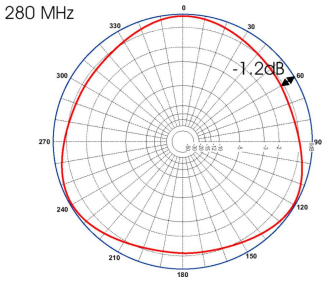


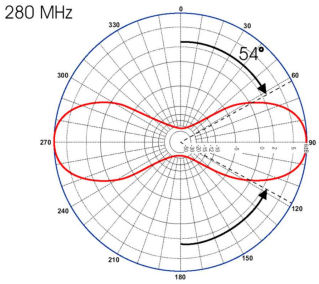


Configuration of antenna system horizontal radiation pattern vertical radiation pattern

3. Gain in vertical plane 4,5dB, radiation pattern H 360°, E 54°

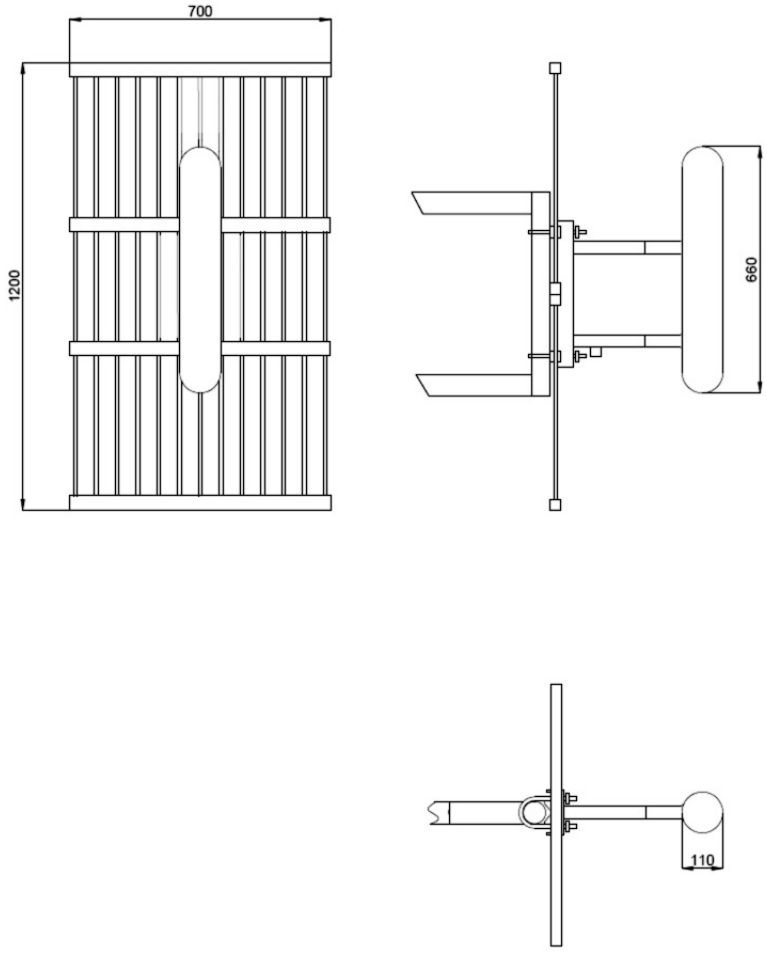




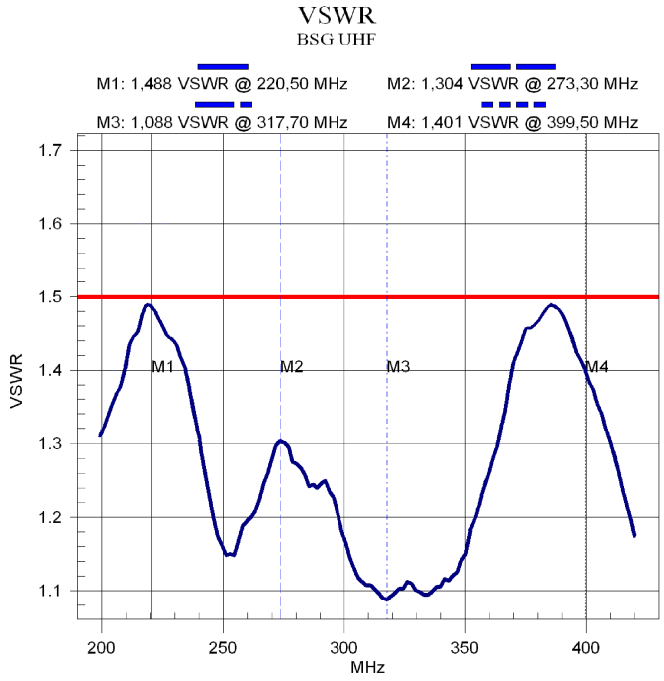


Configuration of antenna system horizontal radiation pattern vertical radiation pattern

4. Gain in vertical plane 5,3 dB, radiation pattern H 360°, E 54°

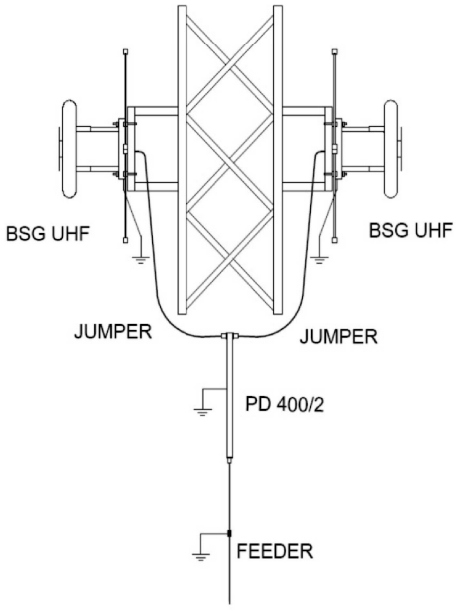


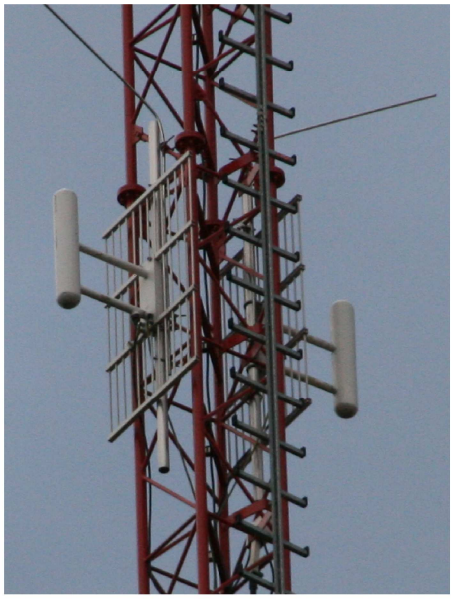
BSG UHF antenna



VSWR of the BSG UHF antenna

Measuring in free space with Anritsu Sitemaster S331A, Huber-Suhner measuring cable, calibration in the frequency range 200-420MHz. Measuring in output of PD250/2 power divider.





The BSG UHF antennas in a dual system assuring an omnidirectional radiation pattern