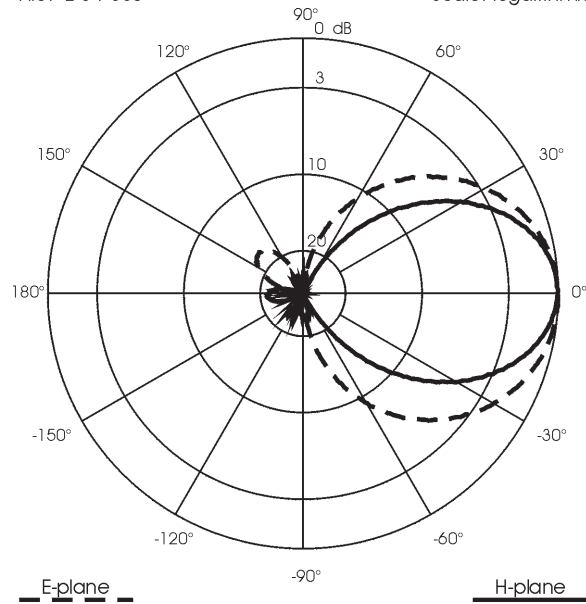


TYPICAL RADIATION PATTERN at 920 MHz

File: E-04-008

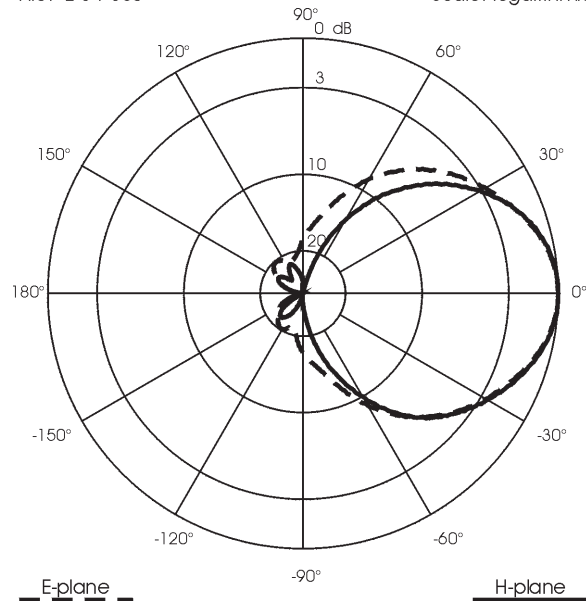
Scale: logarithmic



TYPICAL RADIATION PATTERN at 1920 MHz

File: E-04-008

Scale: logarithmic



*Directional 900 / 1800 / UMTS*

**SPB - 918 - 10**

*Base Station Multi-Band Antenna (GSM, DCS, DECT, UMTS)*



*Installation Manual*

## DESCRIPTION

Multi-band base station antenna working on 880-960 and 1.7-2.17 GHz conceived for GSM 900& 1800, PCS 1.9GHz, DECT and UMTS systems. The radiant element is made on a PCB and it is protected by a UV-stabilized radome to get the best performance for long periods of time. It's supplied with an aluminium bracket for an easy installation on the mast.

## SPECIFICATIONS

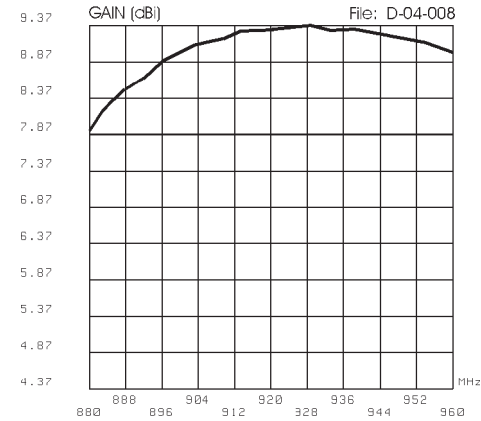
### Electrical Data

Type	:	Planar Reflector
Frequency Range	:	880-960 MHz & 1710-2170 MHz
Impedance	:	50 $\Omega$ Unbalanced
Polarization	:	Linear Vertical
Gain	:	9.4 dBi at 900 MHz; 8.7 dBi at 1.8 GHz
3 dB Beamwidth Vertical	:	E-plane 68° at 920 MHz; 62° at 1920 MHz
3 dB Beamwidth Horizontal	:	H-plane 49° at 920 MHz; 72° at 1920 MHz
Downtilt	:	0°
Front to back ratio	:	$\geq 20$ dB in bandwidth
V.S.W.R. in Bandwidth	:	$\leq 1.6:1$ TX band 900; $\leq 2.0:1$ RX band 900 $\leq 1.5:1$ from 1.17 to 2.02 GHz $\leq 2.0:1$ from 2.02 to 2.17 GHz
Max Power	:	20 Watts (CW) at 50° C
Feed System / Position	:	Direct DC-ground / Center
Cable Type / Length	:	RG 58 C/U / 22 cm, other length on request
Connector type	:	SMA-female or SMA-male, other type on request

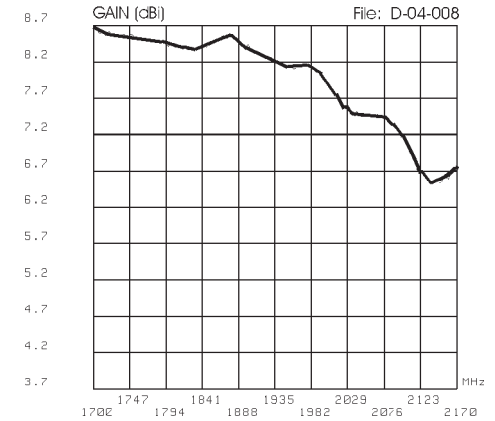
### Mechanical Data

Housing Materials	:	PCB, Aluminium, Brass
Radome Material	:	Grey ABS RAL 7001 UV Stabilized
Wind Load / Resistance	:	134 N at 150 Km/h / 160 Km/h
Wind Surface	:	0.08 m <sup>2</sup>
Dimensions (approx.)	:	305 x 230 x 65 mm without bracket
Weight (approx.)	:	1100 gr
Operating Temperature	:	-20° C to 80° C
Mounting Mast	:	$\varnothing$ 25-42 mm

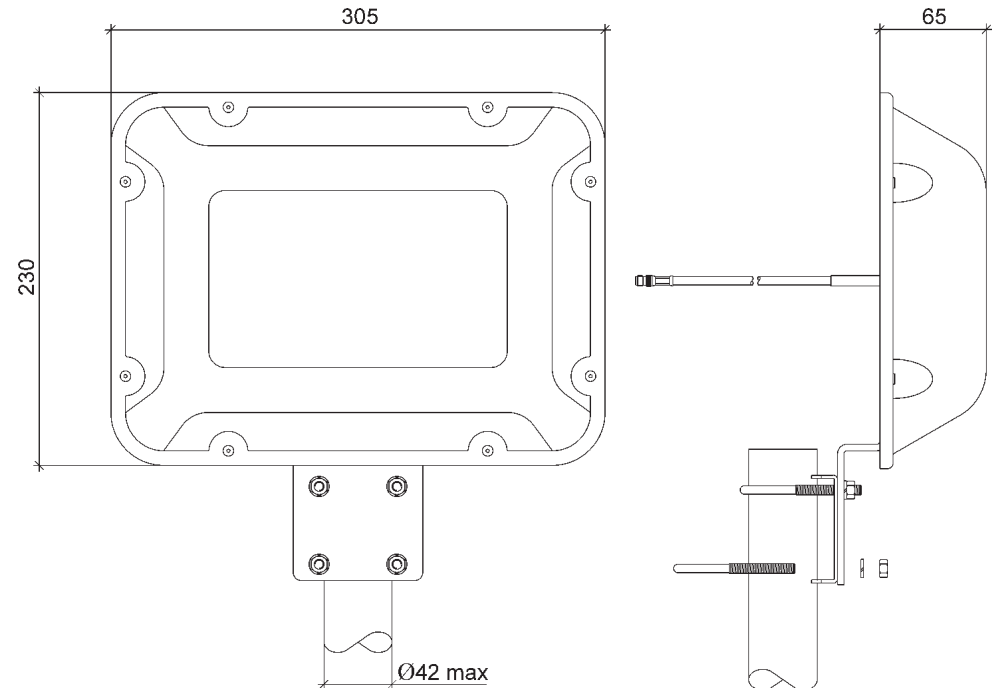
TYPICAL GAIN DIAGRAM vs FREQUENCY



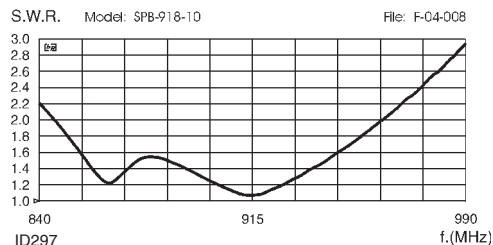
TYPICAL GAIN DIAGRAM vs FREQUENCY



## MOUNTING INSTRUCTIONS



TYPICAL S.W.R. RESPONSE



TYPICAL S.W.R. RESPONSE

