

## Planar Combination Antenna F60ZAD

Desk Mount

WLAN 2400/5300 MHz + GSM 850/900/1800/1900 MHz + UMTS  
+ GPS high gain



- **No changes and modifications on the body**
- **Mounting by adhesive bonding possible on non-metallic surfaces (adhesive bonding antenna)**
- **Including 868 MHz – services and DECT**
- **Our products are RoHS- and REACH-conform**



## Technical Data

### GSM

Frequency Range	850/900/1800/1900 + 2100 MHz
VSWR*	< 2.0 typ.
Peak Gain*	+2 dBi typ. (900 MHz) +3 dBi typ. (1800 MHz) +1 dBi typ. (2100 MHz)
Power max.	10 W
Diagnostic resistor	10 kΩ (others on request)

### GPS

Frequency	1575.42 MHz
VSWR	1.5 typ.
Peak Gain	25 dBi typ.
Power Supply	3V to 5V; 25mA typ.
V <sub>DD</sub> max.	+10V <sub>DC</sub>
Input Power max.	+17dBm
Current max.	30mA

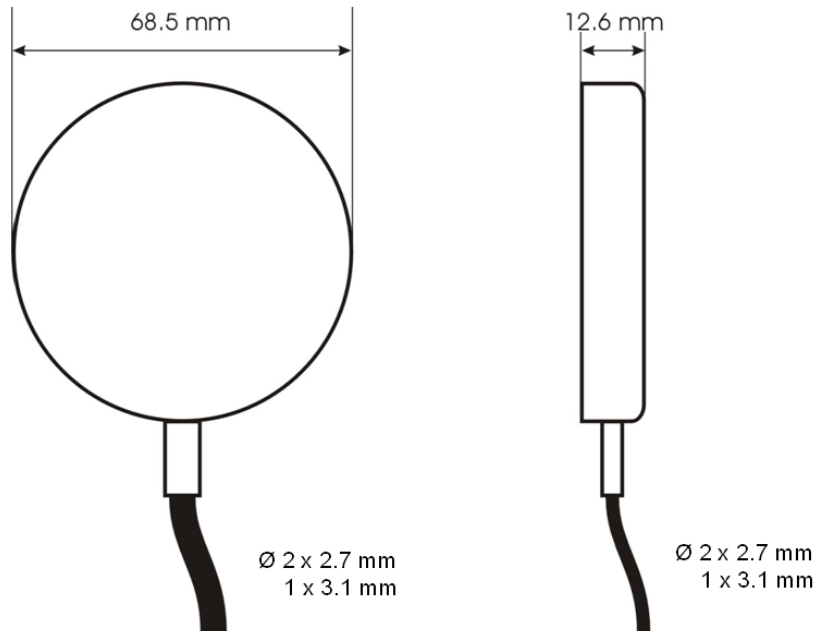
### WLAN

Frequency Range	2400/5300 MHz
VSWR*	< 2.0 typ.
Peak Gain*	+4 dBi typ. (2400 MHz) +1 dBi typ. (5300 MHz)
Power max.	10 W

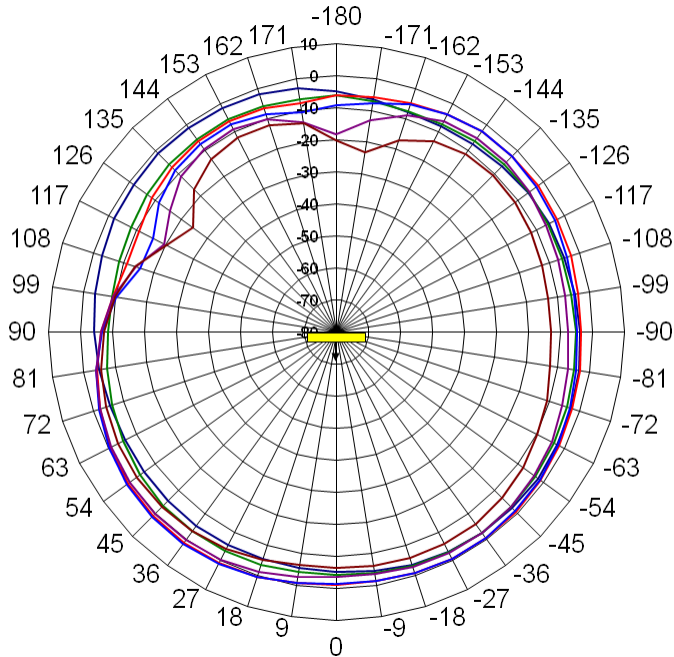
\* Measured with 0.6m cable on 30x30cm ground plane

## Mechanical Data

Dimensions (ØxH)	ca. 68 mm x 12 mm
Temperature Range	-40°C to +85°C (operating temperature)
Connection (Standard)	ca. 3m connecting cable RG174 with GSM/FME(f); GPS/SMA(m) Ca. 3m connecting cable RG174 low loss with WLAN/SMA(m) Other cablelengths and connectors see ordering example and connector list in Internet

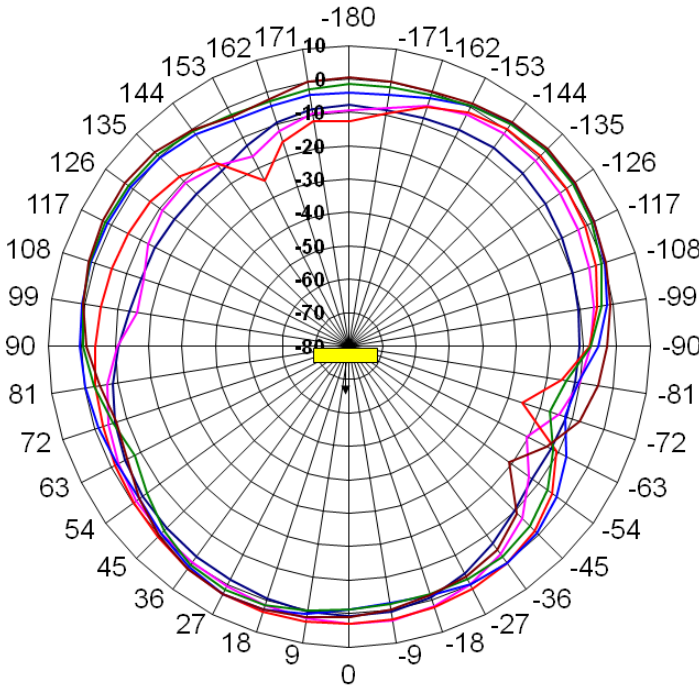


**Radiation diagram (typ.)\***



**GSM 900 MHz**  
Peak Gain: +2 dBi

- 820
- 848
- 876
- 904
- 932
- 960



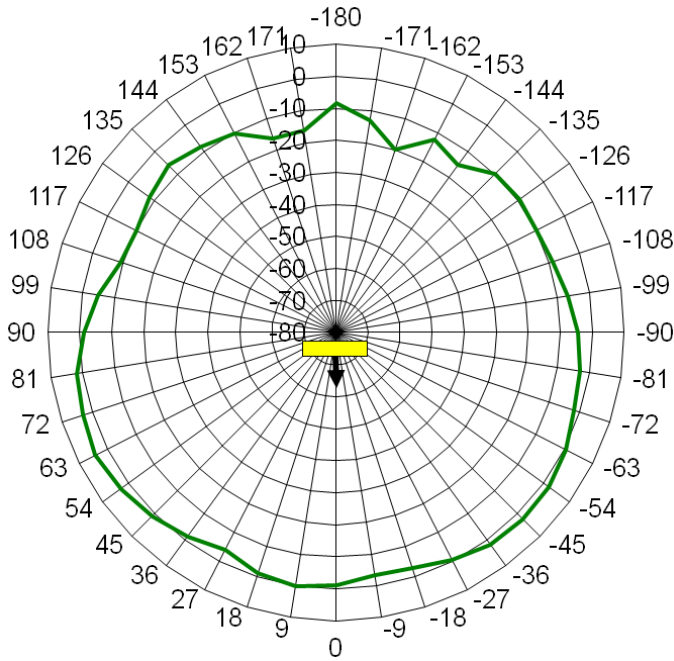
**GSM 1800 MHz**  
Peak Gain: +3 dBi

- 1710
- 1788
- 1866
- 1944
- 2022
- 2100

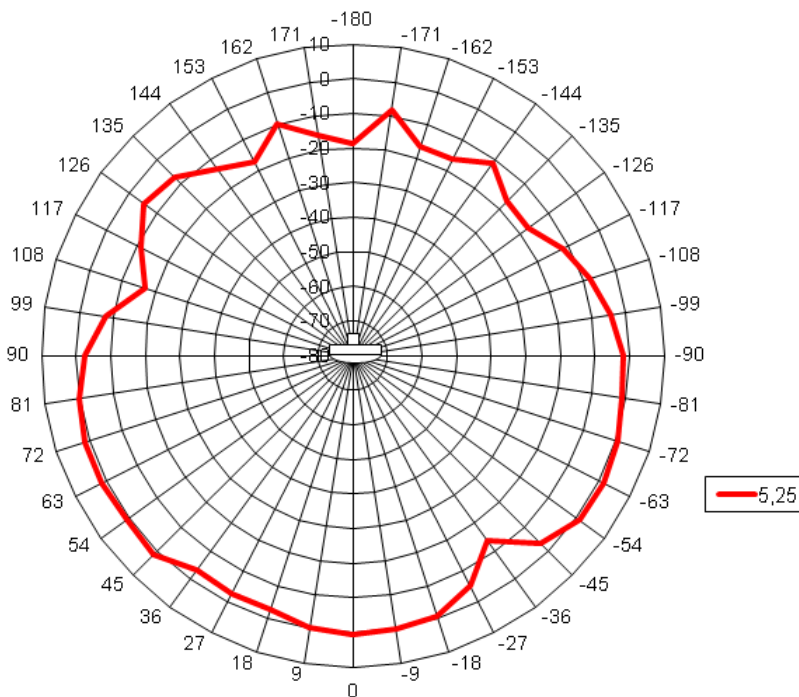
**GSM 2100 MHz**  
Peak Gain: +1 dBi

\* Measured with 0.6m cable on 30x30cm ground plane

**Radiation diagram (typ.)\***



WLAN 2400 MHz  
Peak Gain: +4 dBi



WLAN 5300 MHz  
Peak Gain: +1 dBi

\* Measured with 0.6m cable on 30x30cm ground plane

### Accreditation

<input checked="" type="checkbox"/>	E-Code	<b>e 13 02 1510</b>	high gain (A)
<input type="checkbox"/>	E-Code	<b>e 13 02 1509</b>	low gain (L)
<input type="checkbox"/>	E-Code	<b>e 13 03 6371</b>	low current (V)

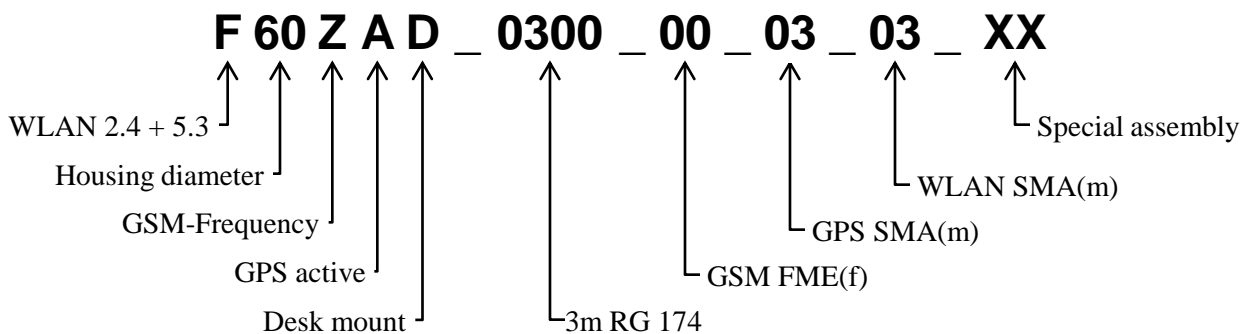
### Mounting Instructions

- To avoid mechanical stress the antenna should not be attached on doors or flaps.
- No extra ground planes are necessary for this antenna (ground plane inside).
- Mountable on all clean, smooth and stainless surfaces.
- Don't stick the antenna under +10°C to get an optimal adhesion of the sticker.
- Clean seating nonfat before sticking by using the delivered cleaning cloth
- First remove protection foil on one side of the sticker and stick it on the seating, avoid formation of bubbles.
- Now the other protection foil has to be removed from the sticker. Stick the antenna on with it's level side and advantage direction (cable pointing below) and apply sufficient pressure.

**Delivery includes:** Sticker; cleaning cloth with isopropanol

**Important:** Before sticking please test the adhesive bonding possibility of the material!

### Ordering example



### Warranty

The lawful warranty conditions apply.