

## Planar Combination Antenna C60ZAW\_WP

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

Window Mount



- Including 868 MHz – services and DECT
- Adhesive bonding antenna waterproof IP68, appropriate to mount the antenna outside
- No changes and modifications on the body
- Our products are RoHS- and REACH-conform



## Technical Data

### GSM

|                     |                                                                           |
|---------------------|---------------------------------------------------------------------------|
| Frequency Range     | 850/900/1800/1900 + 2100 MHz                                              |
| VSWR*               | < 2.0 typ.                                                                |
| Peak Gain*          | -1 dBi typ. (900 MHz)<br>+2 dBi typ. (1800 MHz)<br>+2 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                |

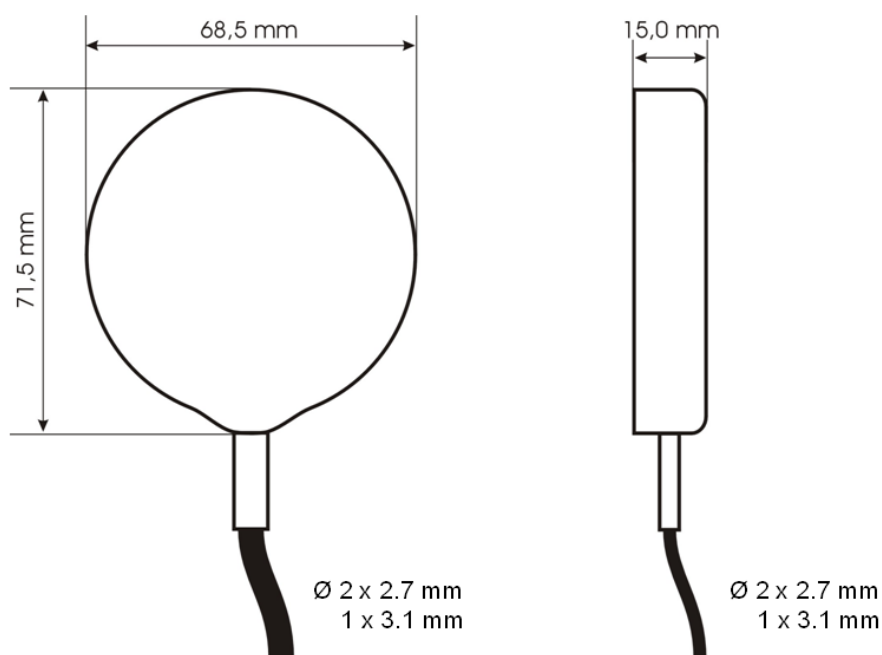
### WLAN

|                 |            |
|-----------------|------------|
| Frequency Range | 2400 MHz   |
| VSWR*           | < 2.0 typ. |
| Peak Gain*      | +4 dBi typ |
| Power max.      | 10 W       |

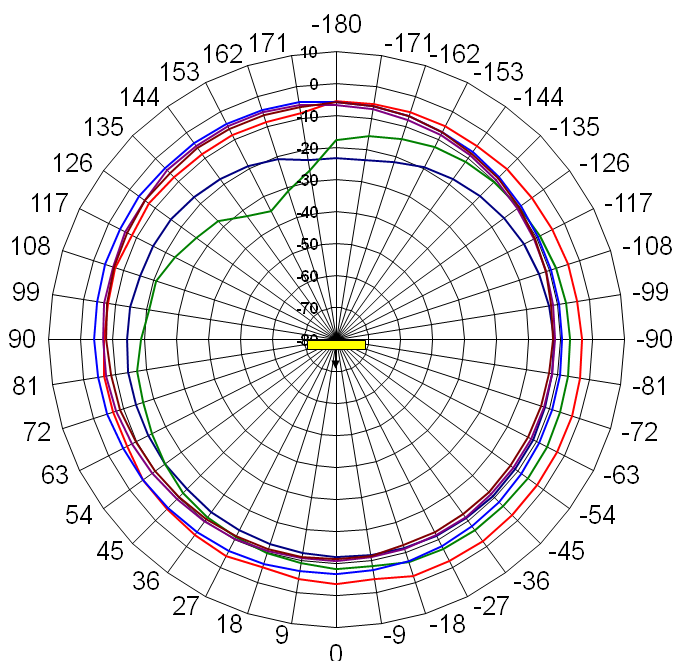
\* Measured with 0.6m cable on 30x30cm glass pane

## Mechanical Data

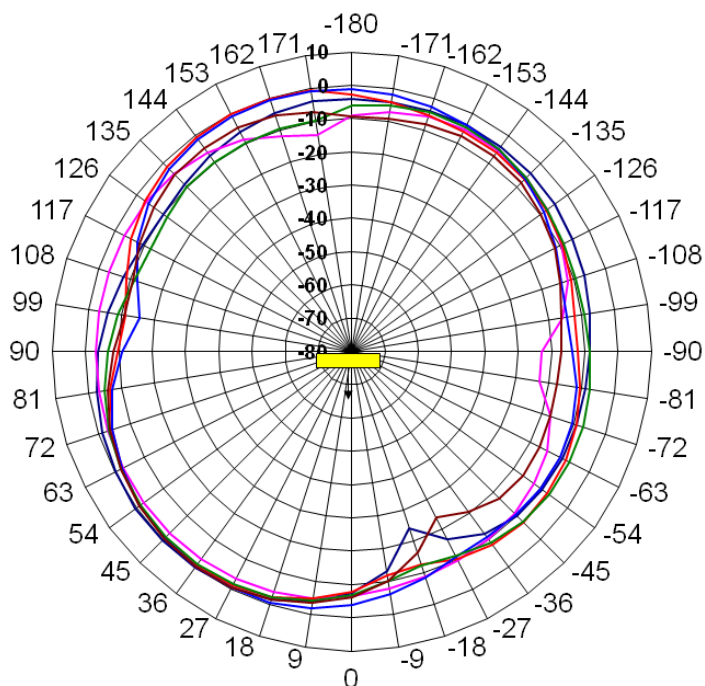
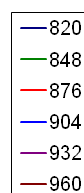
|                       |                                                                                                                                                                                                      |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions (ØxH)      | ca. 70 mm x 15 mm                                                                                                                                                                                    |
| Temperature Range     | -40°C to +85°C (operating temperature)                                                                                                                                                               |
| Connection (Standard) | ca. 3m connecting cable RG174 with GSM/FME(f); GPS/SMA(m)<br>ca. 3m connecting cable RG174 with WLAN/SMA(m)<br>Other cablelengths and connectors see ordering example and connector list in Internet |



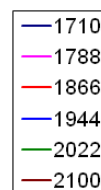
## Radiation diagram (typ.)\*



GSM 900 MHz  
Peak Gain: -1 dBi



GSM 1800 MHz  
Peak Gain: +2 dBi

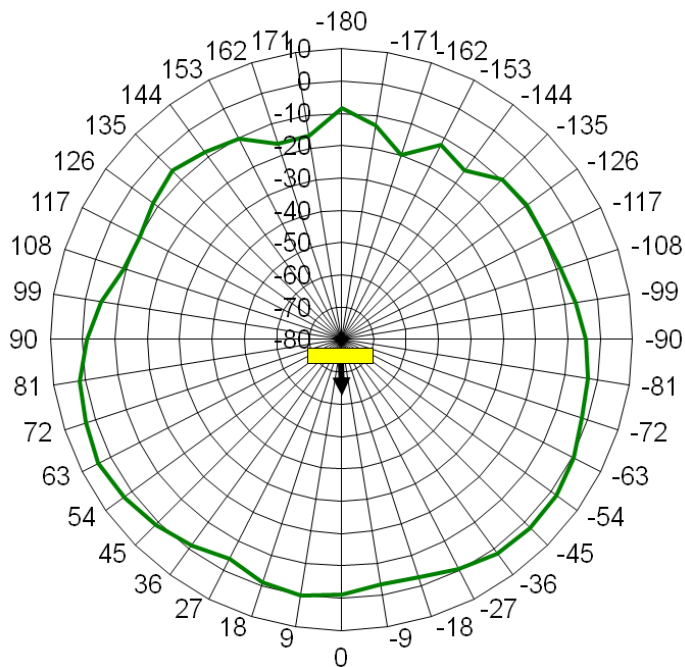


GSM 2100 MHz  
Peak Gain: +2 dBi

\* Measured with 0.6m cable on 30x30cm glass pane

## Radiation diagram (typ.)\*

WLAN 2400 MHz  
Peak Gain: +4 dBi



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

## Accreditation

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

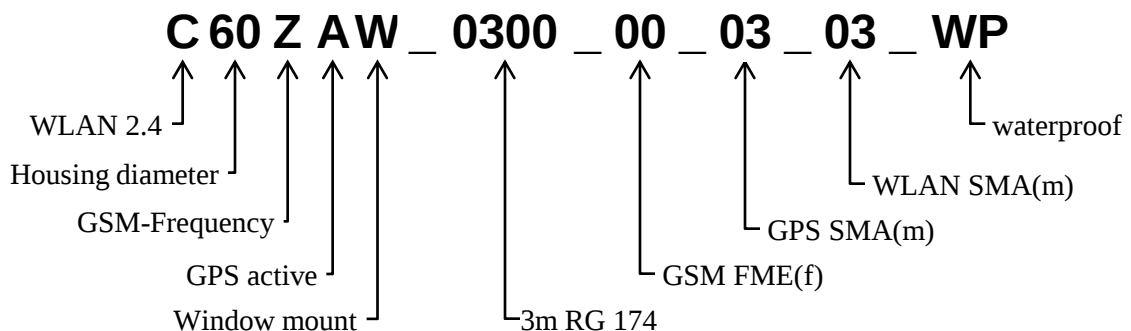
## Mounting Instructions

- 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).
- The Operation of the antenna is only guaranteed by installation with the delivered sticker.
- Mountable on all clean, smooth and stainless surfaces.
- Mountable on glass and non-metallic materials.
- 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.