

## Optimize reception please check

[www.leitronic.ch/Documents/GSM-Empfang-Antenne.pdf](http://www.leitronic.ch/Documents/GSM-Empfang-Antenne.pdf)

## Patch Sticking Antenna

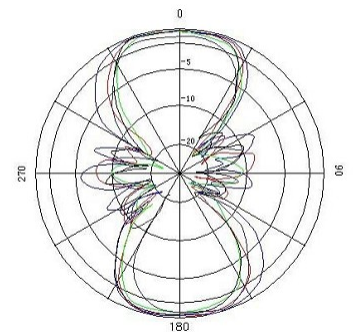
Order-No: 100.0868

incl. 3m cable SMA male

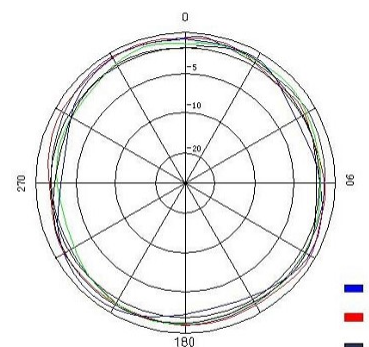
Included in all Leitronic GSM/UMTS-Interfaces

Frequency Range	850/900/1800/1900/2100Mhz
Gain	3.5DB
VSWR	≤1.5:1
Input Impedance	50ohm
Polarization Type	Vertical
Max Input power	20w
Antenna Size	116*22*4mm
Cable length	1m/2m/3m or other
Connector Type	SMA/FME/MCX/MMCX/FAKRA etc.
Antenna mounting	3M Sticking
Antenna color	Black
Storage Temperature	-30°C to +75°C

Radiation Pattern

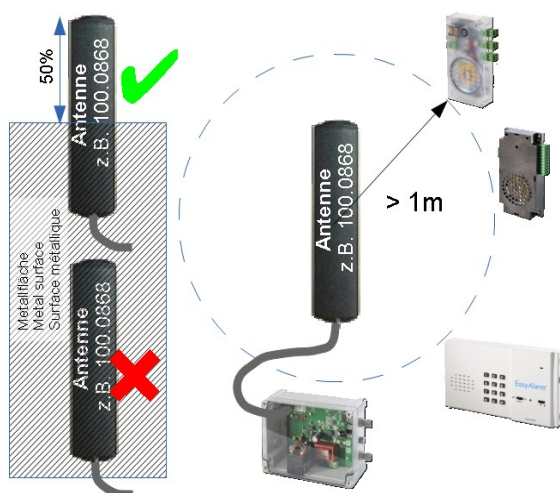


Vertical Pattern



Horizontal Pattern

■ 850MHz  
 ■ 900MHz  
 ■ 1800MHz  
 ■ 1900MHz  
 ■ 2100MHz



### Wall-mount antenna cover:

Order-No: 100.0868CO 150x25x24mm (white)



### Suitable extension cables:

Order-No: 100.0863 SMA female ⇌ cable 10m ⇌ SMA male (approx. 2dB attenuation at 900MHz)  
 Order-No: 100.0865 SMA female ⇌ cable 5m ⇌ SMA male (approx. 2dB attenuation at 900MHz)



## Wall mount antenna

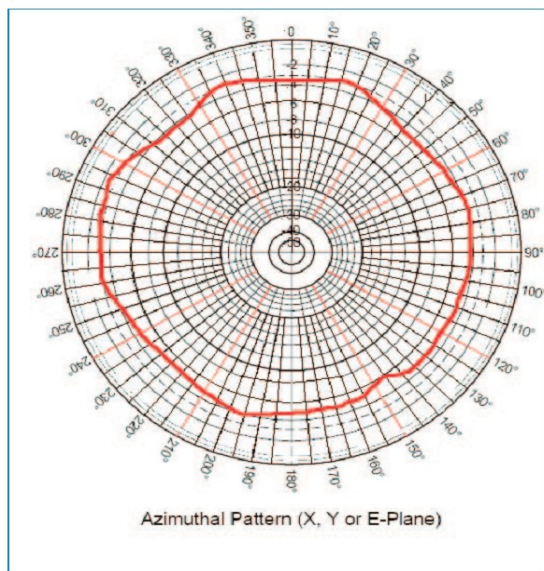
**Order-No: 100.0864**  
incl. 5m cable SMA male

### GSM/UMTS Specifications

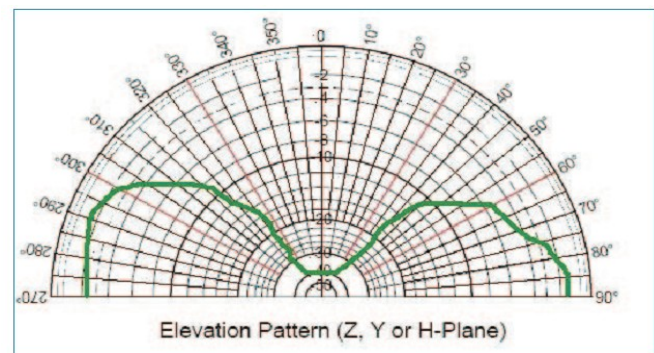
Frequency range:	
GSM 850 / 900 MHz	824 - 960 MHz
GSM 1800 MHz	1710 - 1990 MHz
UMTS 2,1 GHz	1900 - 2170 GHz
Gain	2.14 Maximum dBi
VSWR	< 1.6
Polarization	vertical
Rod length	298 mm
Power max	100 W

### Basic Informationen

Cable length	500 cm
Cable tpy	RG 58
Con GSM	SMA male connector



Azimuth Plane



Elevation Plane

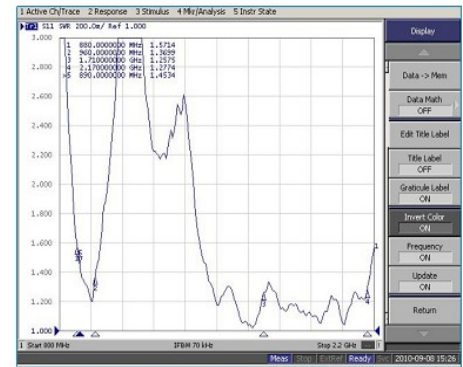
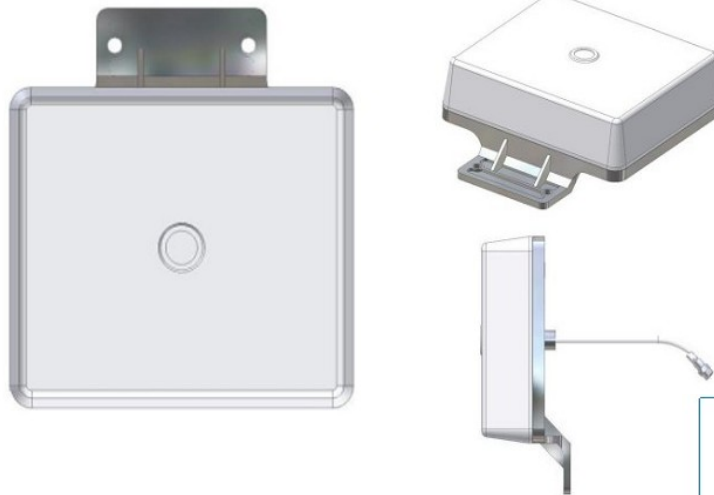
### Suitable extension cables:

Order-No: 100.0863 SMA female ⇄ cable 10m ⇒ SMA male (approx. 2dB attenuation at 900MHz)  
Order-No: 100.0865 SMA female ⇄ cable 5m ⇒ SMA male (approx. 2dB attenuation at 900MHz)



## Directive Antenna

**Order-No: 100.0866**  
incl. 5m cable SMA male



V.S.W.R. Diagram

### GSM/UMTS Specifications

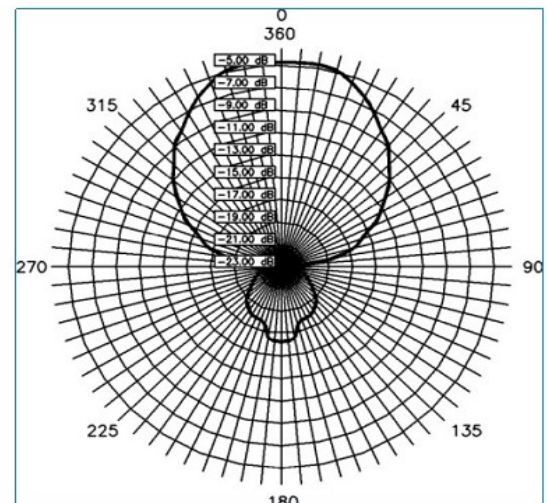
Frequency range:	
GSM 850 / 900 MHz	890 - 960 MHz
GSM 1800 MHz	1710 - 1880 MHz
UMTS 2,1 GHz	1900 - 2170 GHz
Gain	10 dBi
VSWR	< 1.5
Polarization	vertical
Impedance	50 Ohm

### W-LAN/BT Specifications

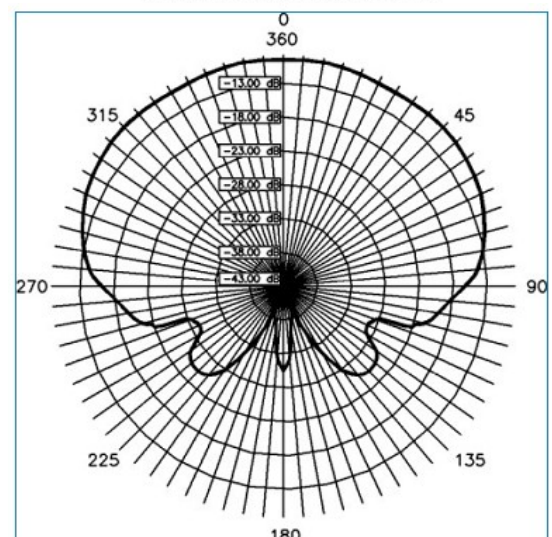
Frequency	2.4 GHz
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### Basic Informationen

Size	162 x 142 x 45 mm
Temperature	-30 to 80 °C
Cable length	5000 mm
Cable tpy	CO100
Con GSM	FME/F
Features	Material: ABS // Chromium plated <b>SMA-male</b> ABS Wind Resistance: 120Km/h On Pale Mount dia22 to dia 50mm
Notes	Metering, Outside Buildings, Weak Signal Areas



Vertical Polarisation @ 915 MHz



Vertical Polarisation @ 1800 MHz/UMTS

### Suitable extension cables:

Order-No: 100.0863 SMA female ⇄ cable 10m ⇒ SMA male (approx. 2dB attenuation at 900MHz)  
Order-No: 100.0865 SMA female ⇄ cable 5m ⇒ SMA male (approx. 2dB attenuation at 900MHz)





## Yagi Antenna

**Order-No: 100.0867**  
incl. 5m cable SMA male

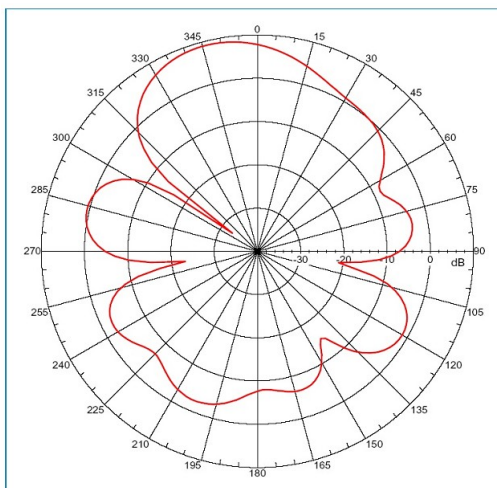


### GSM/UMTS Specifications

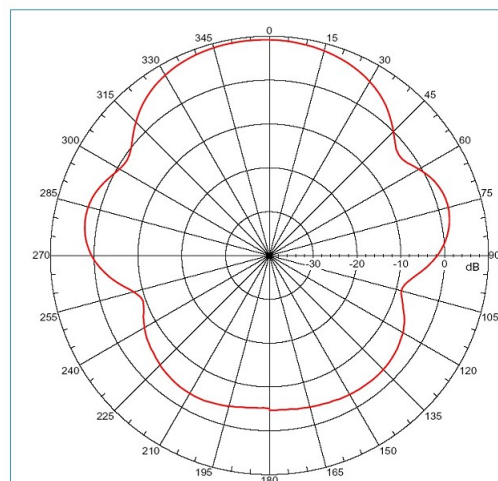
Frequency range:	
GSM 850 / 900 MHz	824 - 960 MHz
GSM 1800 MHz	1710 - 1880 MHz
GSM 1900 MHz	1820 - 1990 MHz
Gain	10 dBi
Impedance	50 Ohm

### Basic Informationen

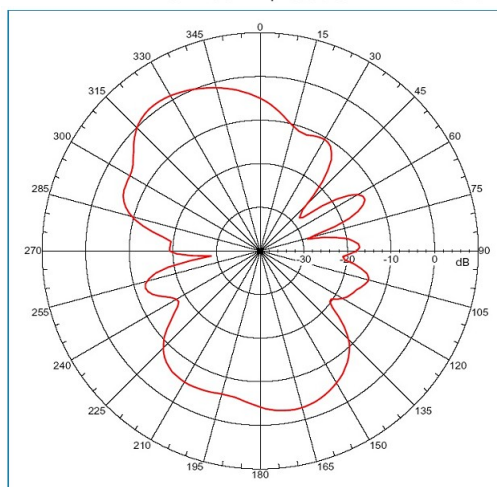
Size	5400 x 2130 x 300 mm
Cable length	10000 mm
Cable tpy	RG 58
Con GSM	SMA male



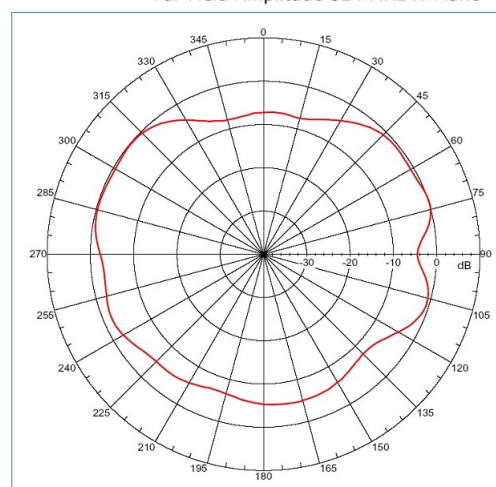
Far Field Amplitude 824 MHz E-Plane



Far Field Amplitude 824 MHz H-Plane



Far Field Amplitude 1710 MHz E-Plane



Far Field Amplitude 1710 MHz H-Plane

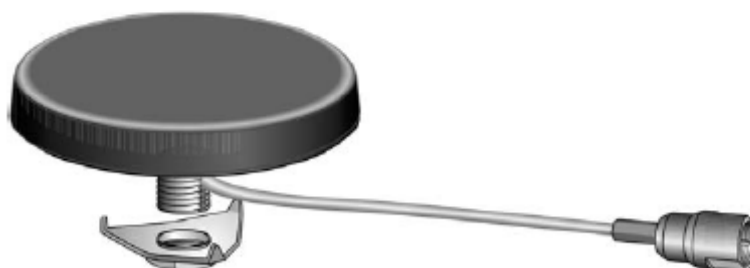
### Suitable extension cables:

Order-No: 100.0863 SMA female ⇐ cable 10m ⇒ SMA male (approx. 2dB attenuation at 900MHz)  
Order-No: 100.0865 SMA female ⇐ cable 5m ⇒ SMA male (approx. 2dB attenuation at 900MHz)



## External planar antenna

Order-No: 100.0860	SPECIFICATIONS
ANTENNA TYPE	Heavy duty omni-directional DUAL BAND linear patch-antenna for trucks, vans, trailers etc.  * LOW PROFILE DESIGN * CAR-WASH PROOF * DC-SHORT (ANTISTATIC) * NO GROUNDPLANE NEEDED
FREQUENCY IMPEDANCE POLARISATION GAIN VSWR	870-960 + 1710-1880 MHz + DECT 1850-1990 MHz Nom. 50 $\Omega$ Linear 0 / 0 dB < 2.0 at frequency resonance
MAX. POWER (GSM part only)	25 Watt (low band) 10 Watt (high band)
COLOUR	Black
DIMENSIONS BUILD-IN DEPTH	$\varnothing$ 92 x 16 mm Approx. 17 mm
WEIGHT	Approx. 125 g
MOUNTING	Preferable on horizontal surface (+/-15° allowed) (Mounting hole $\varnothing$ 12 - 20 mm)
MATERIAL	ABS, brass and PCB IP65 Classified (when mounted on vehicle)



MOUNT TYPE	Bolt-on type with double self-adhesive tape for effective sealing
CABLE / CONNECTOR	0,15 m RG316/U cable and FME (m) connector

### Suitable extension cables:

Order-No:	100.0861	FME female $\leftrightarrow$ cable 1m $\Rightarrow$ SMA male
Order-No:	100.0862	FME female $\leftrightarrow$ cable 4m $\Rightarrow$ SMA male
Order-No:	100.0863	SMA female $\leftrightarrow$ cable 10m $\Rightarrow$ SMA male (approx. 2dB attenuation at 900MHz)
Order-No:	100.0865	SMA female $\leftrightarrow$ cable 5m $\Rightarrow$ SMA male (approx. 2dB attenuation at 900MHz)

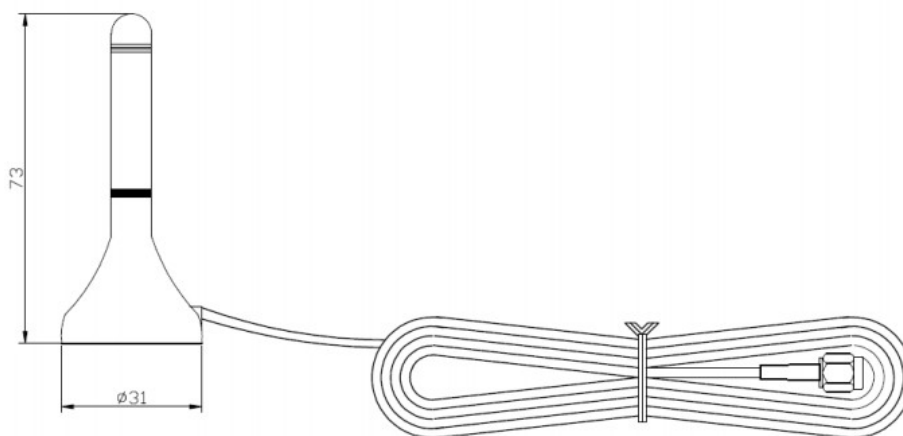


## Magnet antenna

Order-No: 100.0869  
incl. 3m cable SMA male

Frequency Range	800/900/1800/2100/2600Mhz
Gain	3DB
VSWR	$\leq 1.5:1$
Input Impedance	50ohm
Polarization Type	Vertical
Max Input power	20w
Antenna Size	$\varnothing 30 \times 73\text{mm}$
Cable length	3m
Connector Type	SMA male
Antenna mounting	Magnetic
Antenna color	Black
Storage Temperature	-30°C to +75°C

### Size drawing



### Suitable extension cables:

Order-No: 100.0863 SMA female  $\leftrightarrow$  cable 10m  $\Rightarrow$  SMA male (approx. 2dB attenuation at 900MHz)  
Order-No: 100.0865 SMA female  $\leftrightarrow$  cable 5m  $\Rightarrow$  SMA male (approx. 2dB attenuation at 900MHz)

