

# R 900/1800-12/14

Dual Band Yagi Antenna for the 900 & 1800 MHz Bands



## DESCRIPTION:

- ★ Dual band shrouded yagi antenna.
- ★ Covers the 900 MHz GSM band (880–960 MHz) as well as the 1800 MHz DCS-1800/PCN band (1710–1890 MHz).
- ★ 12 dBd gain on 900 MHz and 14 dBd gain on 1800 MHz.
- ★ Linearly polarised with orthogonal polarisations for the two bands.
- ★ H-plane beam widths 35° and 29° for the 900 MHz and 1800 MHz bands respectively.
- ★ E-plane beam widths 33° and 26° for the two bands.
- ★ A sturdy glass reinforced plastic shroud ensures effective protection against the weather.
- ★ All metal parts are DC grounded for noise reduction and lightning protection.
- ★ Materials carefully chosen for minimum electrolytic corrosion and intermodulation.
- ★ Supplied with circular cast alloy clamp for mounting on 25–50 mm mast tubes.
- ★ Reliable and robust design for optimum performance and long lifetime.



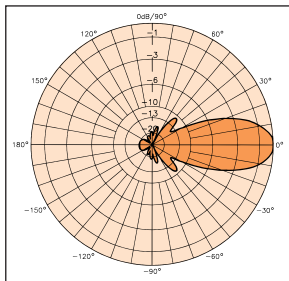
## GENERAL SPECIFICATIONS:

R 900/1800-12/14	
ANTENNA TYPE	Dual band yagi antenna
FREQUENCY	GSM: 880–960 MHz PCN: 1710–1890 MHz
GAIN	GSM: 14 dBi 12 dBd PCN: 16 dBi 14 dBd
H-PLANE BEAM WIDTH (-3 dB points)	GSM: 35° PCN: 29°
E-PLANE BEAM WIDTH (-3 dB points)	GSM: 33° PCN: 26°
MAXIMUM POWER	50 watt

## ORDERING:

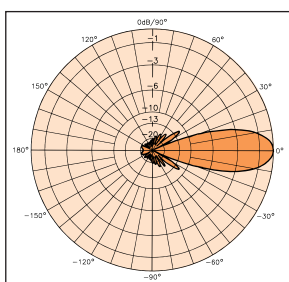
The antenna is supplied in the standard version with bracket suiting 25-50 mm dia. mast tube. Available for 50-75 mm dia. mast tube as an option.

### TYPICAL RADIATION PATTERN (H-PLANE)



Outer ring: 12 dBd

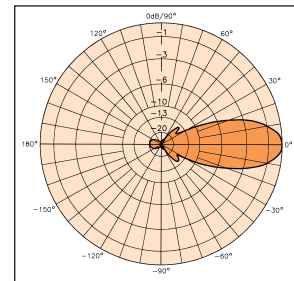
900 MHz  
(GSM)



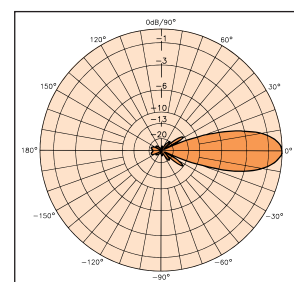
Outer ring: 14 dBd

1800 MHz  
(PCN)

### TYPICAL RADIATION PATTERN (E-PLANE)



Outer ring: 12 dBd



Outer ring: 14 dBd

PROCOM A/S reserve the right to amend specifications without prior notice.

# R 900/1800-12/14

Dual Band Yagi Antenna for  
the 900 & 1800 MHz Bands

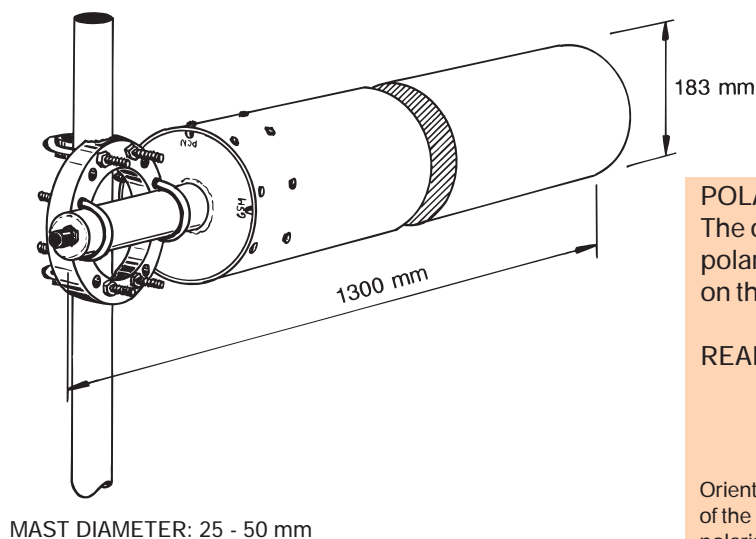


# GSM 900/1800

## SPECIFICATIONS:

ELECTRICAL	
MODEL	R 900/1800-12/14
ANTENNA TYPE	Dual band yagi antenna
FREQUENCY	GSM: 880-960 MHz PCN: 1710-1890 MHz
IMPEDANCE	Nom. 50 $\Omega$
POLARISATION	Two linear orthogonal
GAIN	GSM: 14 dBi 12 dBd PCN: 16 dBi 14 dBd
H-PLANE BEAM WIDTH (-3 dB points)	GSM: 35° PCN: 29°
E-PLANE BEAM WIDTH (-3 dB points)	GSM: 33° PCN: 26°
FRONT TO BACK RATIO	20 dB
BANDWIDTH	GSM : 80 MHz PCN : 180 MHz
SWR	$\leq 1.5$ (typ. $\leq 1.3$ )
MAXIMUM POWER	50 watt
ANTISTATIC PROTECTION	All metal parts DC-grounded
MECHANICAL	
CONNECTOR	"N" type female
WIND LOAD	214 N (at 150 km/h)
COLOUR	Grey
SHROUD	183 mm dia. glass fiber tube
DIMENSIONS	Length 1300 mm, diameter 183 mm
WEIGHT	5 kg
MOUNTING	Supplied with circular cast alloy clamp for mounting on 25-50 mm dia. mast tubes

## MOUNTING OUTLINE:



MAST DIAMETER: 25 - 50 mm

### POLARISATION:

The orientation of the linear polarisation in each band is indicated on the back side of the antenna.

### REAR VIEW:

