

R 1800-...

Shrouded Yagi Antennas for the 1800 MHz Band

DESCRIPTION

- Series of three shrouded yagi antennas with 6–15 dBd gain.
- Covers the 1800 MHz DCS-1800/PCN band (1710 – 1880 MHz).
- Can be used for both vertical and horizontal polarisation.
- H-plane beam widths 24° to 80° and E-plane beam widths 23° to 60° depending on model.
- 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 fixed Norstell clamp (48.5 mm dia.)
- Reliable and robust design for optimum performance and long lifetime.

R 1800-6



R 1800-11



R 1800-15



ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
R 1800-6	120000070
R 1800-11	120000071
R 1800-15	120000072

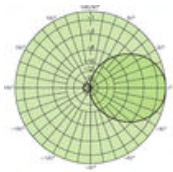
GENERAL SPECIFICATIONS

MODEL	R 1800-6	R 1800-11	R 1800-15
ANTENNA TYPE	Shrouded yagi antenna		
FREQUENCY	1710 – 1880 MHz		
GAIN	8 dBi 6 dBd	13 dBi 11 dBd	17 dBi 15 dBd
H-PLANE BEAM WIDTH (-3 DB POINTS)	80°	43°	24–30°
E-PLANE BEAM WIDTH (-3 DB POINTS)	60°	40°	23–27°
MAXIMUM POWER	150 W		

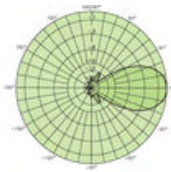
SPECIFICATIONS

MODEL	R 1800-6	R 1800-11	R 1800-15
ELECTRICAL			
ANTENNA TYPE	Shrouded yagi		
FREQUENCY	1710 – 1880 MHz		
IMPEDANCE	Nom. 50 Ω		
POLARISATION	Vertical or horizontal		
GAIN	8 dBi 6 dBd	13 dBi 11 dBd	17 dBi 15 dBd
H-PLANE BEAM WIDTH (-3 DB POINTS)	80°	43°	24 – 30°
E-PLANE BEAM WIDTH (-3 DB POINTS)	60°	40°	23 – 27°
FRONT TO BACK RATIO	> 20 dB	> 20 dB	20 dB
BAND WIDTH	170 MHz		
SWR	≤ 1.5		
MAX. POWER	150 W		
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)		
MECHANICAL			
TEMP. RANGE	-25°C → +60°C		
CONNECTOR	"N" type female		
WIND LOAD @ 160 km/h	34 N	63 N	114 N
WIND SURFACE	0.027 m ²	0.050 m ²	0.090 m ²
COLOUR	Grey		
SHROUD	86 mm dia. glass fibre tube		
LENGTH	420 mm	620 mm	1300 mm
WEIGHT	1.6 kg	1.8 kg	2.1 kg
MOUNTING	Supplied with fixed Norstell clamp (48.5 mm dia.) for mounting on 45–50 mm mast tubes		

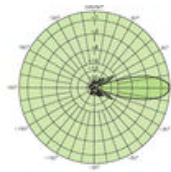
TYPICAL RADIATION PATTERN (H-PLANE)



Outer ring: 6 dBd

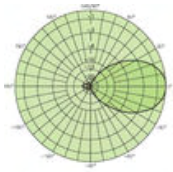


Outer ring: 11 dBd

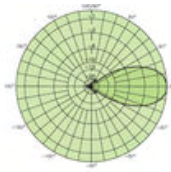


Outer ring: 15 dBd

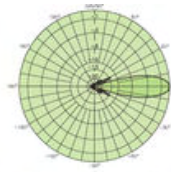
TYPICAL RADIATION PATTERN (E-PLANE)



Outer ring: 6 dBd

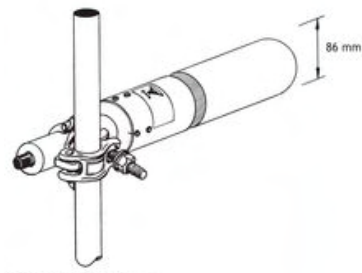


Outer ring: 11 dBd



Outer ring: 15 dBd

MOUNTING OUTLINE




MAST DIAMETER: 45 - 50 mm

POLARISATION:
The orientation of the polarisation is indicated on the back side of the antenna.


HORIZONTAL POLARISATION:
Mount the antenna with the letter H on the rear oriented horizontally.

REAR VIEW:



VERTICAL POLARISATION:
Mount the antenna with the letter H on the rear oriented vertically.

REAR VIEW:




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

24/06/2009