

R 900-7/..., R 900-10/..., R 900-14/...

Directional Antennas with 7, 10 and 14 dBd Gain for the 900 MHz Band



DESCRIPTION:

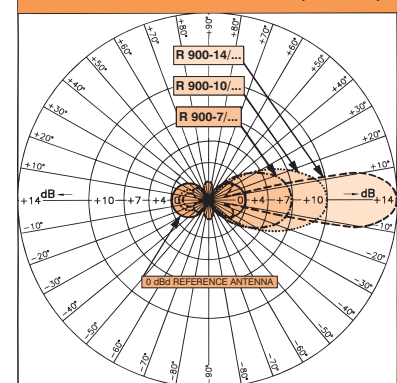
- ★ These antennas are 4-, 8- and 18-element Yagi antennas with 7, 10, and 14 dBd gain, respectively.
- ★ When mounted for vertical polarisation the horizontal coverage is R 900-7: 74°, R 900-10: 52° and R 900-14: 32°.
- ★ These Yagis incorporate baluns optimized for wide bandwidth and accurate matching.
- ★ The entire balun unit and feeder cable inlet are completely sealed in a polythene moulding ensuring permanent waterproof connections. The antennas are supplied with a 0.8 or 3 m "tail" of RG 213 terminated with an N-female connector. (See specifications).
- ★ Radiating elements, supporting booms and adjoining metal castings have been constructed in high quality aluminium alloys to prevent corrosion. All metal parts are DC-grounded.
- ★ The antennas are designed for back mounting and are provided with rear extended booms.
- ★ These antennas can be stacked and fed in phase with a matching harness for increased gain.
- ★ A mast clamp for fixation on 30-58 mm diameter mast tube is enclosed.

SPECIFICATIONS:

MODEL	R 900-7/...	R 900-10/...	R 900-14/...
ELECTRICAL			
ANTENNA TYPE	4-element Yagi	8-element Yagi	18-element Yagi
FREQUENCY	l: 820-900 MHz h: 870-960 MHz		
IMPEDANCE	Nom. 50 Ω		
POLARISATION	Vertical or horizontal		
GAIN	9 dBi 7 dBd	12 dBi 10 dBd	16 dBi 14 dBd
FRONT TO BACK RATIO	16 dB	20 dB	25 dB
HALF-POWER BEAMWIDTH	E-plane: 56° H-plane: 74°	E-plane: 42° H-plane: 52°	E-plane: 23° H-plane: 32°
BANDWIDTH	80-90 MHz		
SWR	≤ 1.5		
MAX. POWER	150 watt		
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)		
MECHANICAL			
CONNECTION	0.8 m tail of RG 213 terminated with type "N" female connector	0.8 m tail of RG 213 terminated with type "N" female connector	3 m tail of RG 213 terminated with type "N" female connector
WIND SURFACE	0.034 m ²	0.047 m ²	0.091 m ²
WIND LOAD	36 N (at 150 km/h)	50 N (at 150 km/h)	97 N (at 150 km/h)
COLOUR	"Aluminium"		
MATERIALS	Elements/Boom/Saddle clamps: Aluminium alloys. Fittings: Stainless steel. Bracket: Hot-dipped galvanized steel		
BOOM LENGTH	Approx. 0.69 m	Approx. 0.97 m	Approx. 2.04 m
BOOM DIA.	25.4 mm		
MAX. ELEMENT LENGTH	0.21 m		
DIA. OF ELEMENTS	9.5 mm		
WEIGHT	Approx. 2.1 kg	Approx. 2.8 kg	Approx. 4.2 kg
MOUNTING	Supplied with mast bracket suiting 30-58 mm dia. mast tube		

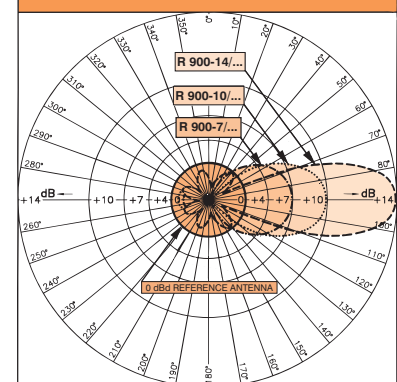


TYPICAL RADIATION PATTERN (E-PLANE)



If the antennas are mounted for vertical polarisation these curves show the radiation patterns in the vertical plane.

TYPICAL RADIATION PATTERN (H-PLANE)



If the antennas are mounted for vertical polarisation these curves show the radiation patterns in the horizontal plane (horizontal coverage).

ORDERING DESIGNATIONS

FREQ.	TYPE	4-element Yagi 7 dBd	8-element Yagi 10 dBd	18-element Yagi 14 dBd
820-900 MHz		R 900-7/l	R 900-10/l	R 900-14/l
870-960 MHz		R 900-7/h	R 900-10/h	R 900-14/h

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