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.



ORDERING DESIGNATIONS

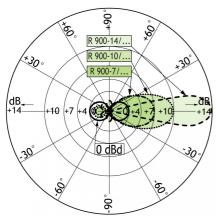
FREQUENCY	820 - 900 MHZ		
TYPE	PRODUCT NO.		
R 900-7/I	120000058	4-element Yagi 7 dBd	
R 900-10/I	120000060	8-element Yagi 10 dBd	
R 900-14/I	120000062	18-element Yagi 14 dBd	
FREQUENCY	870 - 960 MHZ		
TYPE	PRODUCT NO.		
R 900-7/h	120000059	4-element Yagi 7 dBd	
R 900-10/h	120000061	8-element Yagi 10 dBd	
R 900-14/h	120000063	18-element Yagi 14 dBd	

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	50 Ω			
POLARIZATION	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 W			
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)			
MECHANICAL				
TEMP. RANGE	-25°C → +60°C			
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	43 N @ 160 km/h	59 N @ 160 km/h	119 N @ 160 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	
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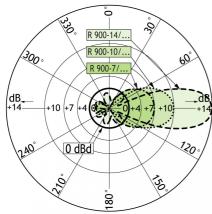


TYPICAL RADIATION PATTERN (E-PLANE)



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

TYPICAL RADIATION PATTERN (H-PLANE)



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



 $\ensuremath{\mathsf{PROCOM}}$ A/S reserve the right to amend specifications without prior notice.

24/02/14