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	12000058	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 (Connector shows	-grounded 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
MOUNTING	Supplied with mast bracket suiting 30-58 mm dia. mast tube		



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).



PROCOM France S.A.R.L. se réserve le droit d'améliorer les spécifications sans préavis. 24/02/14

