

R 70-3/..., R 70-7/..., R 70-10/...

Directional Antennas with 3, 7 and 10 dBd Gain
for the 450 MHz Band

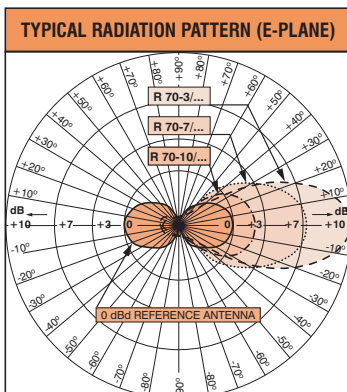


DESCRIPTION:

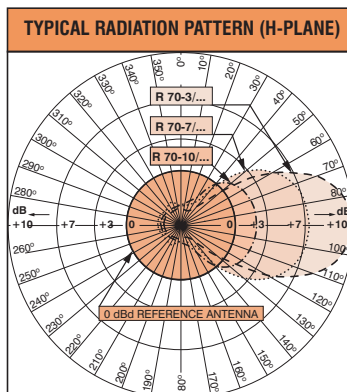
- ★ These antennas are 2-, 4- and 8-element Yagi antennas with 3, 7, and 10 dBd gain, respectively.
- ★ When mounted for vertical polarisation the horizontal coverage is R 70-3: 100°, R 70-7: 74° and R 70-10: 52°.
- ★ These Yagis incorporate baluns optimized for wide bandwidth and accurate matching.
- ★ 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 3m "tail" of RG 213 terminated with an N-female connector.
- ★ 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 70-3/...	R 70-7/...	R 70-10/...
ELECTRICAL			
ANTENNA TYPE	2-element Yagi	4-element Yagi	8-element Yagi
FREQUENCY	l: 380-430 MHz h: 420-470 MHz		
IMPEDANCE	50 Ω		
POLARISATION	Vertical or horizontal		
GAIN	5 dBi 3 dBd	9 dBi 7 dBd	12 dBi 10 dBd
FRONT TO BACK RATIO	12 dB	16 dB	20 dB
HALF-POWER BEAMWIDTH	E-plane: 72° H-plane: 100°	E-plane: 56° H-plane: 74°	E-plane: 42° H-plane: 52°
BANDWIDTH	50 MHz		
SWR	≤ 1.5		
MAX. POWER	150 watt		
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)		
MECHANICAL			
CONNECTION	3m tail of RG 213 terminated with type "N" female connector		
WIND SURFACE	0.046 m²	0.061 m²	0.080 m²
WIND LOAD	50 N (at 150 km/h)	65 N (at 150 km/h)	85 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. 0.65 m	Approx. 0.9 m	Approx. 1.4 m
BOOM DIA.	31.8 mm		
MAX. ELEMENT LENGTH	0.43 m		
DIA. OF ELEMENTS	13 mm		
WEIGHT	Approx. 3.1 kg	Approx. 3.4 kg	Approx. 3.7 kg
MOUNTING	Supplied with mast bracket suiting 30-58 mm dia. mast tube		



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



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

ORDERING DESIGNATIONS

	FREQ.	380-430 MHz	420-470 MHz
TYPE			
2-element Yagi 3 dBd		R 70-3/l	R 70-3/h
4-element Yagi 7 dBd		R 70-7/l	R 70-7/h
8-element Yagi 10 dBd		R 70-10/l	R 70-10/h

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