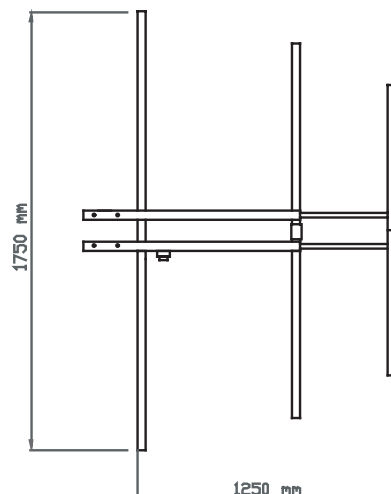


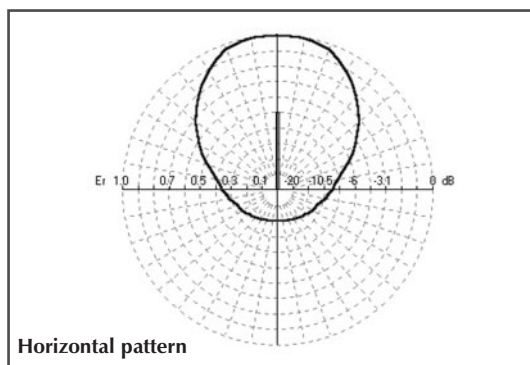
# DRL-3 DIRECTIONAL FM BROADCAST ANTENNAS

- **General.** The DRL-3 Vertical Directional Antenna is designed for FM Broadcast Band (87,5 –108 MHz) . Each antenna is made with stainless steel (PX3 models) or resistant aluminium alloy (P3 models) and composed of three vertical elements and a mounting bracket.
- **Excellent Performance** for stereo and SCA operation.
- **Directional.** The azimuth pattern is directional narrow lobe and normally can't be modified by the mounting structure presence. Over 30 standard patterns are available.
- **Antenna systems.** Stacking more antennas it's possible to obtain customized patterns, increase the gain and the power handling capacity according to user requirements. Custom patterns, electrical beam tilt and null fill are available upon request.
- **Broadband.** Suitable for channel or broadband operations with multi-channel combiners.
- **Easy installation.** The standard mounting brackets are designed for instant installation on poles with diameters from 32 mm to 90 mm. Special brackets are available upon request.
- **Water, icing, moisture protection.** The input connector is protected against rain and icing by a special housing. The internal balun is also protected against water, icing and moisture ingress by a sealed housing.
- **State of the art** mechanical design, employing the finest materials (stainless steel, non-corrosive aluminium alloy, marine brass, virgin PTFE) resulting in long life service .
- **Lightning resistance** is guaranteed by the DC ground potential of the entire antenna.



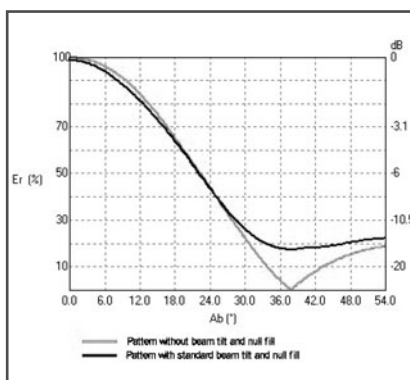
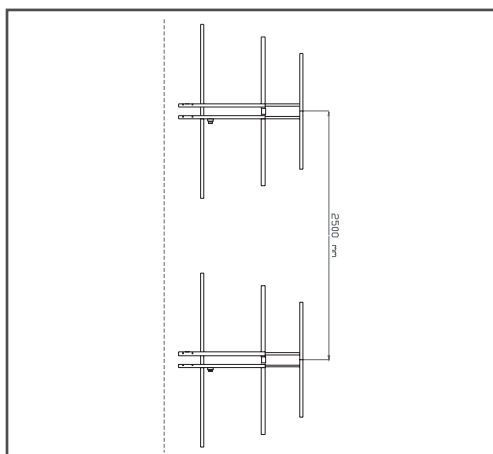
R.F. Data:	
Frequency Range	87.5 - 108.0 MHz
Bandwidth	Broadband
Polarization	Vertical
<b>Connectors:</b>	
P3/N	N female
P3/716	DIN 7/16"
P3/LC	LC
P3/78	EIA 7/8"
<b>Max. power handling capability:</b>	
P3/N	0.6 kW
P3/716	1.4 kW
P3/LC	1.6 kW
P3/78	3.5 kW
Gain (at mid band, ref. to $\lambda/2$ dipole)	5.2 dBd
VSWR (in the whole band)	< 1.35 :1
Impedance	50 $\Omega$
Frontal to back ratio	> 21 dB
<b>Wind load (ref. 150 Km/h):</b>	
Frontal	19 Kg
Lateral	34 Kg
<b>Grounding</b>	
	Via clamps
Horizontal Beamwidth (at -3 dB, at mid band)	84°
Vertical Beamwidth (at -3 dB, at mid band)	62°

Mechanicals	
<b>Materials:</b>	
P3	Anodized Aluminium
PX3	Stainless Steel
Pole diameter	32 - 90 mm. (others on request)
Dimensions (HxWxD)	1750x50x1250 mm
<b>Weight (with pole clamp):</b>	
P3	6.5 kg
PX3	8.5 kg



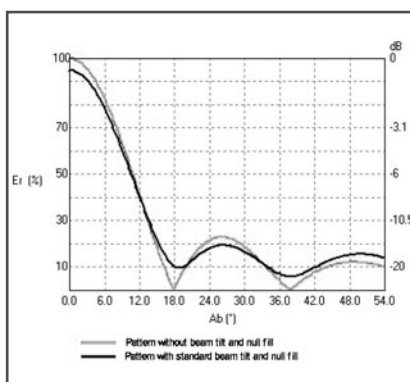
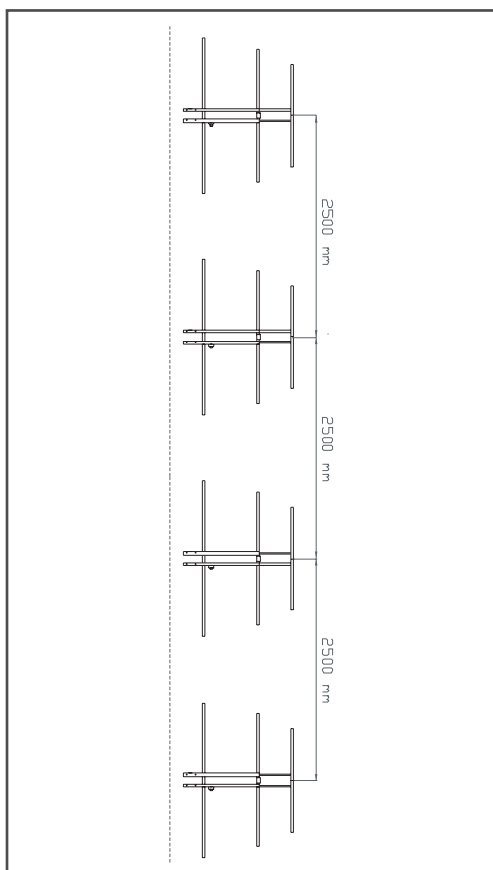
# P3 SERIES DIRECTIONAL FM BROADCAST ANTENNAS

## DIPOLES ARRANGEMENT

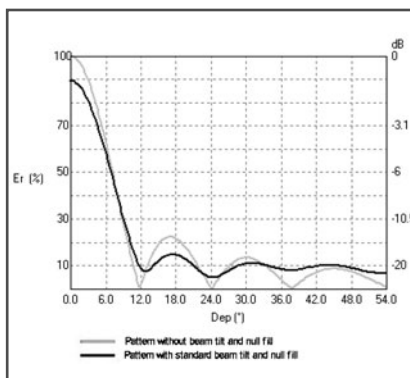


2 P3 DIPOLES - TYPICAL VERTICAL RADIATION PATTERNS AT MID-BAND IN VERTICAL POLARIZATION

## DIPOLES ARRANGEMENT



4 P3 DIPOLES - TYPICAL VERTICAL RADIATION PATTERNS AT MID-BAND IN VERTICAL POLARIZATION



6 P3 DIPOLES - TYPICAL VERTICAL RADIATION PATTERNS AT MID-BAND IN VERTICAL POLARIZATION

## General arrays specifications

MODEL	NUMBER OF ANTENNAS	MAXIMUM POWER (W)	GAIN (dBd)	WEIGHT (KG) P3-PX3	VERTICAL DIMENSIONS (mt)
P3/N-2	2	1.200	+ 8.1	13.0 - 17.0	4.25
P3/N-3	3	1.800	+ 9.8	19.5 - 25.5	6.75
P3/N-4	4	2.400	+ 10.9	26.0 - 34.0	9.25
P3/N-6	6	3.600	+ 12.2	39.0 - 51.0	14.25
P3/N-8	8	4.800	+ 13.4	52.0 - 68.0	19.25
P3/716-2	2	2.800	+ 8.1	13.0 - 17.0	4.25
P3/716-3	3	4.200	+ 9.8	19.5 - 25.5	6.75
P3/716-4	4	5.600	+ 10.9	26.0 - 34.0	9.25
P3/716-6	6	8.400	+ 12.2	39.0 - 51.0	14.25
P3/716-8	8	11.200	+ 13.4	52.0 - 68.0	19.25
P3/LC-2	2	3.200	+ 8.1	13.0 - 17.0	4.25
P3/LC-3	3	4.800	+ 9.8	19.5 - 25.5	6.75
P3/LC-4	4	6.400	+ 10.9	26.0 - 34.0	9.25
P3/LC-6	6	9.600	+ 12.2	39.0 - 51.0	14.25
P3/LC-8	8	12.800	+ 13.4	52.0 - 68.0	19.25
P3/78-2	2	7.000	+ 8.1	13.0 - 17.0	4.25
P3/78-3	3	10.500	+ 9.8	19.5 - 25.5	6.75
P3/78-4	4	14.000	+ 10.9	26.0 - 34.0	9.25
P3/78-6	6	21.000	+ 12.2	39.0 - 51.0	14.25
P3/78-8	8	28.000	+ 13.4	52.0 - 68.0	19.25