9 dBd HD omni antenna 340 - 370 MHz, low PIM

DESCRIPTION

- The 4220 Series omni antenna is designed for demanding applications where a durable and high performance colinear is required.
- The centre fed dipole design and feed network gives a stable radiation pattern across a wide bandwidth, and allows tilted beam designs to be effectively employed without large pattern distortions.
- High quality materials and manufacturing techniques are employed to ensure that the antenna has excellent intermodulation performance & wide bandwidth characteristics for multi-channel trunked radio communication systems.
- The antenna has been designed to withstand lightning strike.
- Former Skymasts brand product.

SPECIFICATIONS

Electrical	
Frequency	340 - 370 MHz
Max. Input Power	300 W
Omni Deviation	< ± 1 dB
Polarisation	Vertical
Peak Instantaneous Power (PIP)	25 kW
3 dB Beamwidth, E-Plane	8° ±1°
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	8.7 dBd (10.9 dBi)
VSWR	< 1.5:1
Passive Intermodulation	-153dBc (3rd Order, 2 x Tx @ 43dBm)
Lightning Protection	Lightning current handling capability: 200 kA According to EN 62305-1 (Test pulse 10/350 µs)
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)

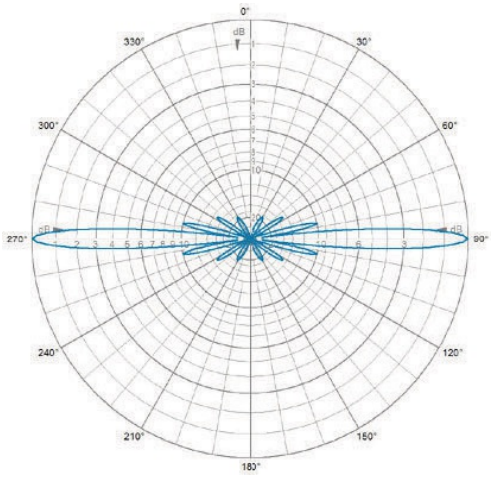
Mechanical	
Connection(s)	7/16 DIN(f)
Materials	Antenna Base: Aluminium Shroud: GRP tube 53mm dia.
Mounting Section	Al. tube 63.5 mm dia. x 350 mm long
Dimensions	5370 (l) x 53 (dia.) mm
Wind Load	417 N (160km/h)
Weight	13 kg / 28.66 lb.
Mounting Bracket	2141.01.00.00 (up to ø120mm) (Ordered Separately) ETC-250 (ø50 to ø76mm) (Ordered Separately)

Environmental	
Operating Temperature Range	-40 °C to +70 °C
Survival Wind Speed	300 km/h
Ingress Protection	IP56

ORDERING

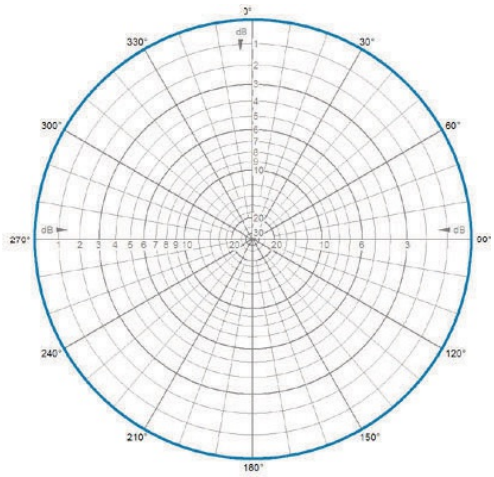
Model	Product No.	Description	Frequency
9 dBd HD omni antenna 340-370MHz, low PIM	4220.09-355-T0	0° Electrical Tilt	340 - 370 MHz
9 dBd HD omni antenna 340-370MHz, low PIM	4220.09-355-T6	6° Electrical Tilt	340 - 370 MHz
9 dBd HD omni antenna 340-370MHz, low PIM	4220.09-355-T8	8° Electrical Tilt	340 - 370 MHz
Galvanised steel parallel bracket 38-120mm (PAIR)	2141.01.00.00		
Extruded Parallel Tube Clamp, 50 - 76mm	ETC-250		

RADIATION PATTERNS



E-Plane | 355 MHz

RADIATION PATTERNS



H-Plane | 355 MHz

INSTALLATION NOTE

Please note that the survival wind speed which is quoted for this product is based on a static load test simulating a single gust of wind, according to EN 1991-1-4. Continuous flexure of the antenna, over long periods of time in extreme conditions, can cause a gradual deterioration in the structural integrity of the materials; this may result in a reduction of specifications or other failure of the antenna structure.

If the antenna is to be installed in conditions where it will be regularly exposed to winds over 160km/h, we recommend that the antenna is stabilised with a second bracket at the top of the shroud.

Non-conductive bracket **FB-HB** can be used in conjunction with one of our **SMC** brackets to achieve this.

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