

9 dBd HD omni antenna 420-470MHz, 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	420 - 470 MHz
Omni Deviation	< ± 1 dB
3 dB Beamwidth, H-Plane	Omnidirectional
Polarisation	Vertical
Peak Instantaneous Power (PIP)	25 kW
3 dB Beamwidth, E-Plane	8° ± 1°
Impedance	50 Ω
Gain	8.7 dBd (10.9 dBi)
VSWR	< 1.5:1
Maximum Input Power	300 W
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(f)
Materials	Antenna Base: Aluminium Shroud: GRP tube 53mm dia.
Mounting Section	Al. tube 63.5mm dia. x 350mm long
Dimensions	5360mm (l) x 53mm (dia.)
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	
Survival Wind Speed	300 km/h
Ingress Protection	IP56

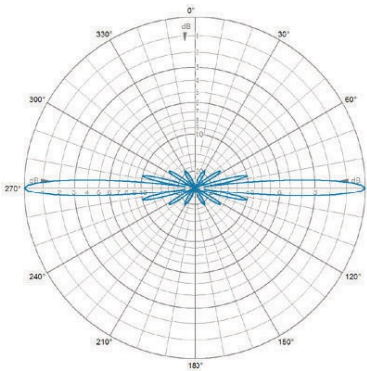
ORDERING

Type	Product No.	Description	Frequency
9 dBd HD omni antenna 420-470MHz, low PIM	4220.09-445-T0	0° Electrical Tilt	420 - 470 MHz
9 dBd HD omni antenna 420-470MHz, low PIM	4220.09-445-T6	6° Electrical Tilt	420 - 470 MHz
Galvanised steel parallel bracket 38-120mm (PAIR)	2141.01.00.00		
Extruded Parallel Tube Clamp, 50 - 76mm	ETC-250		



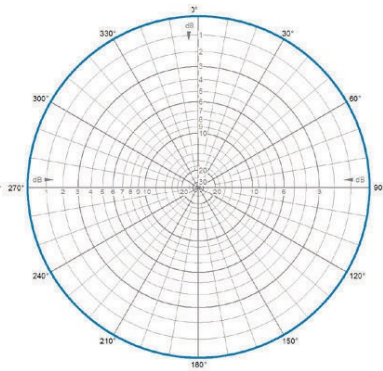
DIAGRAM

RADIATION PATTERNS



E-Plane | 445 MHz

RADIATION PATTERNS



H-Plane | 445 MHz