6 dBd HD omni antenna 380 - 430 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

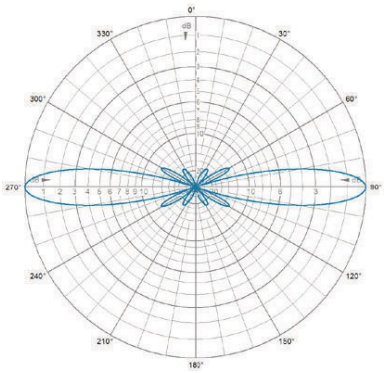
Electrical	
Frequency	380 - 430 MHz
Max. Input Power	300 W
Omni Deviation	< ± 1 dB
Polarisation	Vertical
Peak Instantaneous Power (PIP)	25 kW
3 dB Beamwidth, E-Plane	16° ±1°
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	6 dBd (8.2 dBi)
VSWR	< 1.5:1
Passive Intermodulation	-153dBc (3rd Order, 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	2900 (l) x 53 (dia.) mm / 114.17 x 2.09 (dia.) in.	
Wind Load	230 N (160km/h)	
Weight	8.1 kg / 17.86 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

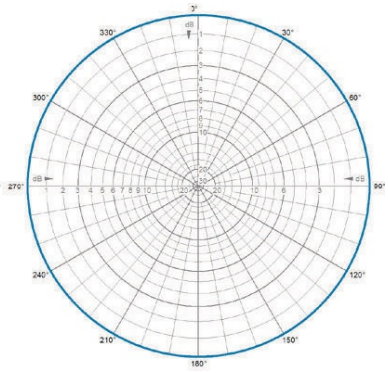
DIAGRAM

RADIATION PATTERNS



E-Plane | 405 MHz

RADIATION PATTERNS



H-Plane | 405 MHz

ORDERING

Model	Product No.	Description	Frequency
6 dBd HD omni antenna 380-430MHz, low PIM	4220.06-405-T0	0° Electrical Tilt	380 - 430 MHz
6 dBd HD omni antenna 380-430MHz, low PIM	4220.06-405-T4	4° Electrical Tilt	380 - 430 MHz
6 dBd HD omni antenna 380-430MHz, low PIM	4220.06-405-T5	5° Electrical Tilt	380 - 430 MHz
6 dBd HD omni antenna 380-430MHz, low PIM	4220.06-405-T6	6° Electrical Tilt	380 - 430 MHz
6 dBd HD omni antenna 380-430MHz, low PIM	4220.06-405-T8	8° Electrical Tilt	380 - 430 MHz
6 dBd HD omni antenna 380-430MHz, low PIM	4220.06-405-T10	10° Electrical Tilt	380 - 430 MHz
6 dBd HD omni antenna 380-430MHz, low PIM	4220.06-405-T12	12° Electrical Tilt	380 - 430 MHz
Galvanised steel parallel bracket 38-120mm (PAIR)	2141.01.00.00		
Extruded Parallel Tube Clamp, 50 - 76mm	ETC-250		

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