

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

DESCRIPTION

- The 422x 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.



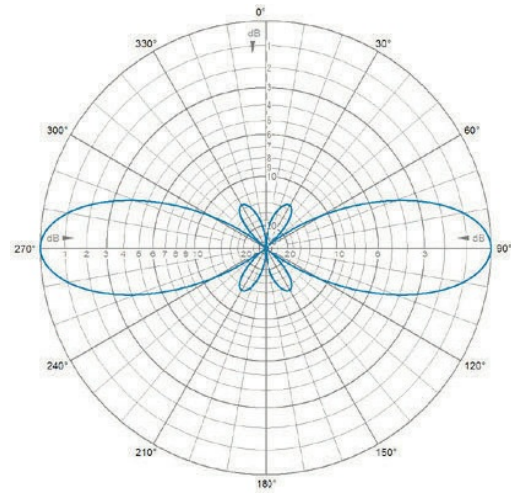
SPECIFICATIONS

Electrical	
Model	422x.03-355-Txx
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	35° ±1°
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Passive Intermodulation	-153 dBc (3rd Order, 2 x Tx @ 43 dBm) (PIM value not guaranteed for N connector version)
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), N(f) or 4.3-10(f)
Materials	Antenna Base : Aluminium Shroud : GRP tube 53 mm dia.
Mounting Section	Al. tube 63.5 mm dia. x 350 mm long
Dimensions	1600 (l) x 53 (dia.) mm / 62.99 x 2.09 (dia.) in.
Wind Load	142 N (160 km/h)
Weight	Approx. 4 kg / 8.82 lb.
Mounting Bracket	ETC-250 (50 to 76 mm dia.) (Ordered Separately) 2141.01.00.00 (up to 120 mm dia.) (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
3 dBd HD omni antenna, low PIM	4220.03-355-T0	7/16 DIN(f) ; 0° Electrical Tilt	340 - 370 MHz
3 dBd HD omni antenna, low PIM	4221.03-355-T0	N(f) ; 0° Electrical Tilt	340 - 370 MHz
3 dBd HD omni antenna, low PIM	4223.03-355-T0	4.3-10(f) ; 0° Electrical Tilt	340 - 370 MHz
Accessories			
Galvanised steel parallel bracket	2141.01.00.00	38 - 120 mm (PAIR)	
Extruded Parallel Tube Clamp	ETC-250	50 - 76 mm	

RADIATION PATTERNS



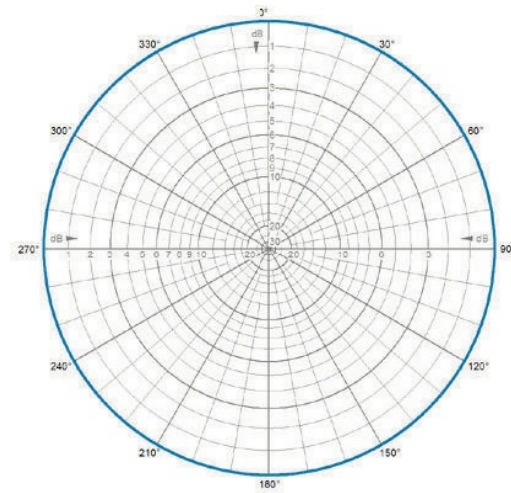
E-Plane | 355 MHz

MOUNTING DETAILS



In order to ensure proper ground connection against lightning strikes, connect the grounding cable to the bolt at the end of the bracket using a locknut (not a part of the bracket assembly). The recommended minimum cross-section of the grounding wire is for copper wire 16 mm² and for aluminium 25 mm².

RADIATION PATTERNS



H-Plane | 355 MHz

