



422x.06-425-Txx

6 dBd HD omni antenna 400 - 450 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.

SPECIFICATION

Electrical	
Model	422x.06-425-Txx
Frequency	400 – 450 MHz
Max. Input Power	300 W
Omni Deviation	< ± 1 dB
3 dB Beamwidth, H-Plane	Omnidirectional
Polarisation	Vertical
Peak Instantaneous Power (PIP)	25 kW
3 dB Beamwidth, E-Plane	16° ±1°

Impedance	50 Ω
Gain	6 dBd (8.2 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)
Environmental	
Operating temperature range	-40 °C to +70 °C
Survival Wind Speed	300 km/h
Ingress Protection	IP56
Mechanical	
Connection(s)	7/16 DIN(f), N(f) or 4.3-10(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 (160 km/h)
Weight	Approx. 8.1 kg / 17.86 lb.
Mounting Bracket	2141.01.00.00 (up to 120 mm dia.) (Ordered Separately) ETC-250 (50 to 76 mm dia.) (Ordered Separately)

ORDERING CODES

Model	Product No.	Frequency	Additional Information
6 dBd HD omni antenna, low PIM	4220.06-425-T0	400 – 450 MHz	7/16 DIN(f) ; 0° Electrical Tilt
6 dBd HD omni antenna, low PIM	4220.06-425-T3	400 – 450 MHz	7/16 DIN(f) ; 3° Electrical Tilt
6 dBd HD omni antenna, low PIM	4220.06-425-T6	400 – 450 MHz	7/16 DIN(f) ; 6° Electrical Tilt
6 dBd HD omni antenna, low PIM	4220.06-425-T8	400 – 450 MHz	7/16 DIN(f) ; 8° Electrical Tilt
6 dBd HD omni antenna, low PIM	4220.06-425-T12	400 – 450 MHz	7/16 DIN(f) ; 12° Electrical Tilt
6 dBd HD omni antenna, low PIM	4221.06-425-T0	400 – 450 MHz	N(f) ; 0° Electrical Tilt
6 dBd HD omni antenna, low PIM	4221.06-425-T3	400 – 450 MHz	N(f) ; 3° Electrical Tilt
6 dBd HD omni antenna, low PIM	4221.06-425-T6	400 – 450 MHz	N(f) ; 6° Electrical Tilt
6 dBd HD omni antenna, low PIM	4221.06-425-T8	400 – 450 MHz	N(f) ; 8° Electrical Tilt
6 dBd HD omni antenna, low PIM	4221.06-425-T12	400 – 450 MHz	N(f) ; 12° Electrical Tilt

6 dBd HD omni antenna, low PIM	4223.06-425-T0	400 – 450 MHz	4.3-10(f) ; 0° Electrical Tilt
6 dBd HD omni antenna, low PIM	4223.06-425-T3	400 – 450 MHz	4.3-10(f) ; 3° Electrical Tilt
6 dBd HD omni antenna, low PIM	4223.06-425-T6	400 – 450 MHz	4.3-10(f) ; 6° Electrical Tilt
6 dBd HD omni antenna, low PIM	4223.06-425-T8	400 – 450 MHz	4.3-10(f) ; 8° Electrical Tilt
6 dBd HD omni antenna, low PIM	4223.06-425-T12	400 – 450 MHz	4.3-10(f) ; 12° Electrical Tilt

ADDITIONAL INFORMATION

Mounting details

