422x.06-445-Txx

6 dBd HD omni antenna 420 - 470 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.

SPECIFICATION

PRODUCT INFORMATION

Model	422x.06-445-Txx
Last Update	7 Oct 2026

ELECTRICAL

Frequency	420 - 470 MHz
Max. Input Power	300 W
Impedance	50 Ω
VSWR	< 1.5:1
Gain	6 dBd (8.2 dBi)
Polarisation	Vertical
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)
3 dB Beamwidth, H-Plane	Omnidirectional
3 dB Beamwidth, E-Plane	16° ±1°
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
Peak Instantaneous Power (PIP)	25 kW
Omni Deviation	< ± 1 dB

ENVIRONMENTAL

Ingress Protection	IP56
Operating temperature range	-40 °C to +70 °C
Survival Wind Speed	300 km/h

MECHANICAL

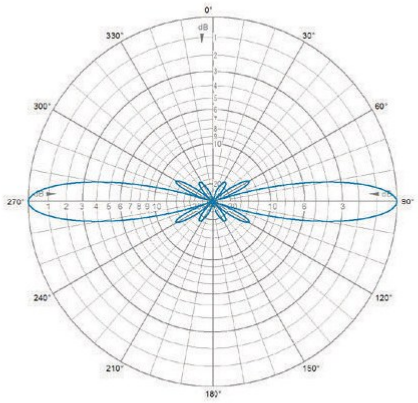
Connection(s)	7/16 DIN(f), N(f) or 4.3-10(f)
Historic Brand	Skymasts
Dimensions	2900 (l) x 53 (dia.) mm / 114.17 x 2.09 (dia.) in.
Weight	6.6 kg / 14.6 lb.
Materials	Antenna Base : Aluminium Shroud : GRP tube 53 mm dia.
Wind Load	230 N (160 km/h)
Mounting Bracket	2141.01.00.00 (up to 120 mm dia.) (Ordered Separately) ETC-250 (50 to 76 mm dia.) (Ordered Separately)
Mounting Section	Al. tube 63.5 mm dia. x 350 mm long

ORDERING CODES

MODEL	ITEM ID	FREQUENCY	ADDITIONAL INFORMATION
6 dBd HD omni antenna, low PIM	4220.06-445-T0	420 - 470 MHz	7/16 DIN(f) ; 0° Electrical Tilt
6 dBd HD omni antenna, low PIM	4220.06-445-T6	420 - 470 MHz	7/16 DIN(f) ; 6° Electrical Tilt
6 dBd HD omni antenna, low PIM	4220.06-445-T8	420 - 470 MHz	7/16 DIN(f) ; 8° Electrical Tilt
6 dBd HD omni antenna, low PIM	4221.06-445-T0	420 - 470 MHz	N(f) ; 0° Electrical Tilt
6 dBd HD omni antenna, low PIM	4221.06-445-T6	420 - 470 MHz	N(f) ; 6° Electrical Tilt
6 dBd HD omni antenna, low PIM	4221.06-445-T8	420 - 470 MHz	N(f) ; 8° Electrical Tilt
6 dBd HD omni antenna, low PIM	4223.06-445-T0	420 - 470 MHz	4.3-10(f) ; 0° Electrical Tilt
6 dBd HD omni antenna, low PIM	4223.06-445-T6	420 - 470 MHz	4.3-10(f) ; 6° Electrical Tilt
6 dBd HD omni antenna, low PIM	4223.06-445-T8	420 - 470 MHz	4.3-10(f) ; 8° Electrical Tilt

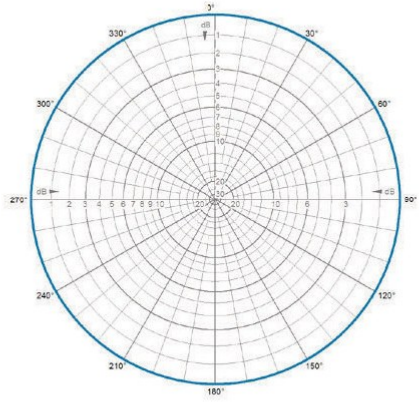
DIAGRAMS

RADIATION PATTERNS



E-Plane | 445 MHz

RADIATION PATTERNS



H-Plane | 445 MHz

ADDITIONAL INFORMATION

Mounting details

