

6 dBd HD omni antenna, 1020 - 1100 MHz ADS-B

DESCRIPTION

- The 4240.06-1050 Series colinear antenna is designed for ADS-B applications where a durable and high performance colinear antenna 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 throughout.
- The antenna has been designed to withstand lightning strike.

SPECIFICATIONS

Electrical	
Model	4240.06-1050
Frequency	1020 - 1100 MHz
Max. Input Power	350 W CW 1 kW peak with 7% duty cycle
Omni Deviation	< ± 1 dB
Polarisation	Vertical
3 dB Beamwidth, E-Plane	16 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	6 dBd (8.2 dBi)
VSWR	< 1.8:1, <1.3:1 at 1030 MHz
Lightning Protection	Lightning current handling capability: 200 kA According to EN 62305-1 (Test pulse 10/350 μs)

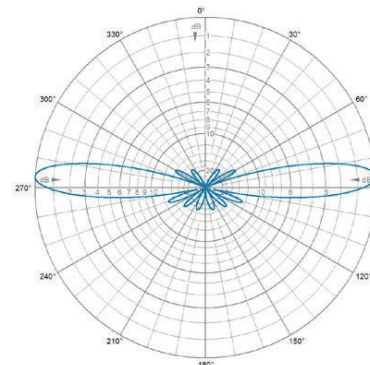
Mechanical	
Connection(s)	N(f)
Materials	Antenna Base : Aluminium Shroud : GRP tube 53mm dia.
Mounting Section	Al. tube 63.5 mm dia. x 350 mm long
Dimensions	1300 (l) x 53 (dia.) mm / 51.18 (l) x 2.09 (dia.) in.
Wind Load	103 N (160 km/h)
Weight	Approx. 6 kg / 13.23 lb.
Mounting Bracket	2141.01.00.00 (up to 120 mm dia.) (Ordered Separately) ETC-250 (50 to 76 mm dia.) (Ordered Separately)

Environmental	
Heat Exposure	EN 60068-2-2 Test Bb 72 h 70 °C
Temperature Cycling	EN 60068-2-14 Test Nb 3 h -40 °C to +70 °C 1 K/min
Humidity Exposure	EN 60068-2-78 40 °C 95% RH 48 h
Humidity Cycling	EN 60068-2-30 Test Db variant 2 40 °C 2 cycles
Survival Wind Speed	300 km/h
Salt Fog Corrosion	EN 60068-2-11
Cold Exposure	EN 60068-2-1 Test Ab 72 h -40 °C
Vibration (Sinusoidal)	EN 60068-2-6 Sweep from 1 to 150 Hz
Vibration (Random)	EN 60068-2-64 Sweep from 1 to 150 Hz
Ingress Protection	IP56
UV Weatherization	EN 60068-2-5
Packaged Drop	EN 60068-2-31



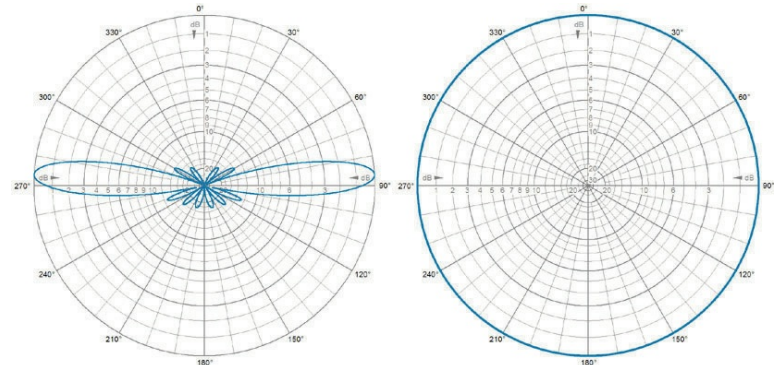
DIAGRAM

RADIATION PATTERNS



E-Plane | 1060 MHz

RADIATION PATTERNS



H-Plane | 1060 MHz

ORDERING

Model	Product No.	Description	Frequency
6 dBd HD omni antenna, ADS-B	4240.06-1050		1020 - 1100 MHz
Accessories			
Galvanised steel parallel bracket	2141.01.00.00	38 - 120 mm (PAIR)	
Extruded Parallel Tube Clamp	ETC-250	50 - 76 mm	

