

TX RX Systems

8.5 dBd HD omni antenna

450-512MHz, low PIM



DS039507-1A

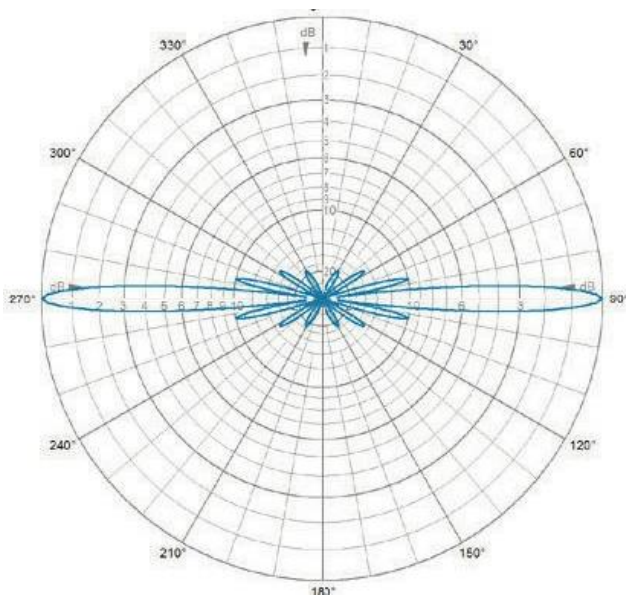
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Model 104-69-8.5-3-07-D7

Product Features

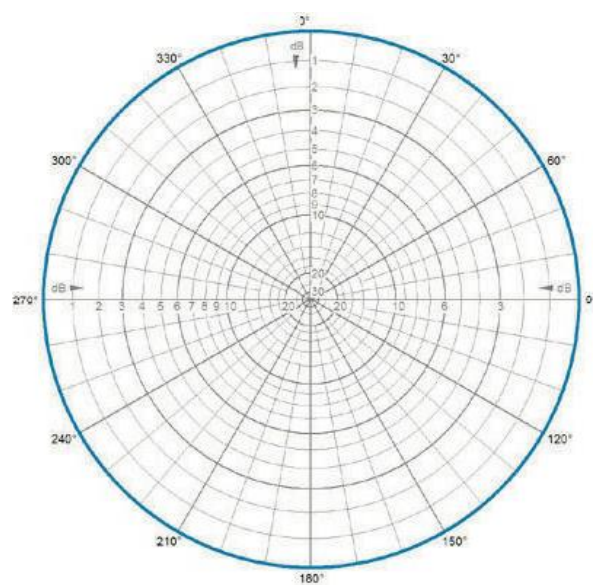
- The 104 Series omni antenna is designed for very demanding applications where a highly durable and high performance colinear is required.
- The center fed dipole design and corporate feed network gives a stable radiation pattern across a wide bandwidth, and allows tilted beam designs to be effectively 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 strikes.

RADIATION PATTERNS



E-Plane | 405 MHz

RADIATION PATTERNS



H-Plane | 480 MHz

Electrical	
Frequency	450 - 512 MHz
Max. Input Power	500 W
Omni Deviation	< ± 1 dB
Polarization	Vertical
Peak Instantaneous Power (PIP)	25 kW
3 dB Beamwidth, E-Plane	8° ±1°
3 dB Beamwidth, H-Plane	Omnidirectional
Downtilt	3°
Impedance	50 Ω
Gain	8.5 dBd (10.7 dBi)
VSWR	< 1.5:1
Passive Intermodulation	-153 dBc (3rd Order, 2 x Tx @ 43 dBm)
Lightning Protection	Lightning current handling capability: 200 kA According
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC short)
Mechanical	
Connection(s)	7/16 DIN(f)
Materials	Antenna Base: Aluminum Shroud: GRP epoxy tube 76mm dia. Radiator: Brass
Mounting Section	Al. tube 88 mm dia. x 450 mm long
Dimensions	4600 (l) x 88 (dia.) mm
Wind Load	515 N (load calculated with 160 km/h wind speed acc. To EN 1991-1-4) Effective wind area 0.4258 m ²
Weight	27 kg / 59.52 lb.
Mounting Bracket	2142.01.00.00 - Galv. Steel Parallel Bracket (Ordered Separately)
Environmental	
Operating temperature range	-40 °C to +70 °C
Survival Wind Speed	200 km/h
Ingress Protection	IP56