



12 dBd HD Deepwave Antenna

740-870MHz



Model #: 104DW-81-12-XX-XX
DS040367-1B

Description

- These durable colinear antennas are designed for LTE/GSM applications where a high-performance antenna is required.
- The center fed dipole design and feed network gives a stable radiation pattern across a wide bandwidth, allows tilted beam designs to be effectively employed without large pattern distortions, and fills the lower pattern nulls.
- A reflector is employed to give the antenna a directional radiation pattern.
- 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.

Electrical Specifications

Parameter	Value
Frequency	740 - 870 MHz
Max. Input Power	600 W
Polarization	Vertical
Peak Instantaneous Power (PIP)	25 kW
Azimuth Beamwidth (3 dB)	220° $\pm$ 2°
Elevation Beamwidth (3 dB)	3° $\pm$ 1°
Impedance (Ohms)	50 Ω
Gain	12 dBd (14.2 dBi)
VSWR	< 1.5:1
Passive Intermodulation	-153 dBc (3rd Order, 2 x Tx @ 43 dBm)
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)



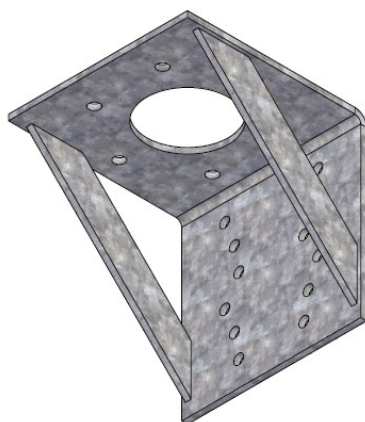
Mechanical Specifications

Parameter	Value
Overall Length	5341 mm (210.28 in)
Mounting	Flanged base with 6 hole fixing on 190.5 mm PCD
Antenna Weight	39.3 kg (86.6 lb)
Wind Load at 160 km/h	1264 N (160km/h)
Connector Type	104DW-81-12-XX-XX: 7/16 DIN Female; 104DW-81-12-XX-XX: 4.3/10 DIN Female
Materials	Antenna Base: Aluminum LM25 Shroud: GRP tube 128 mm dia. Radiating element: Brass

Environmental Specifications

Parameter	Value
Survival Wind Speed	240 km/h
Ingress Protection	IP56

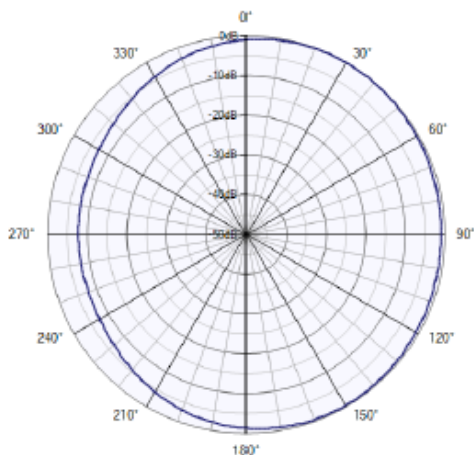
Model	Description
104DW-81-12-00-D7	0° Tilt, 7/16(f)
104DW-81-12-01-D7	1° Tilt, 7/16(f)
104DW-81-12-02-D7	2° Tilt, 7/16(f)
104DW-81-12-03-D7	3° Tilt, 7/16(f)
104DW-81-12-04-D7	4° Tilt, 7/16(f)
104DW-81-12-05-D7	5° Tilt, 7/16(f)
104DW-81-12-00-D4	0° Tilt, 4.3/10(f)
104DW-81-12-01-D4	1° Tilt, 4.3/10(f)
104DW-81-12-02-D4	2° Tilt, 4.3/10(f)
104DW-81-12-03-D4	3° Tilt, 4.3/10(f)
104DW-81-12-04-D4	4° Tilt, 4.3/10(f)
104DW-81-12-05-D4	5° Tilt, 4.3/10(f)
91-00-104A-1	Pole Mount Adapter



Pole Mount Adapter **91-00-104A-1**
for mounting antenna to 3" - 4.5"
diameter pole.

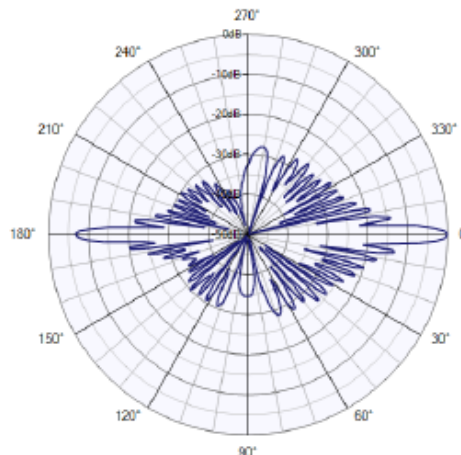


AZIMUTH PATTERN, 805 MHZ



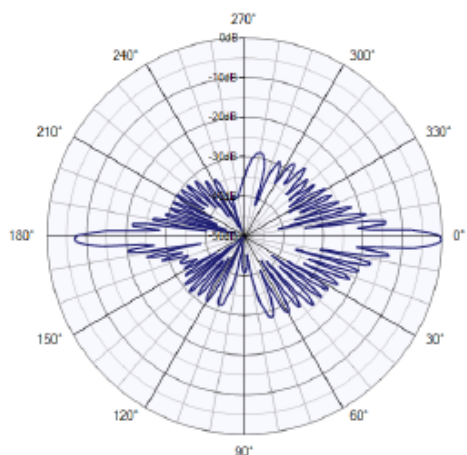
ELEVATION PATTERN

0°, 805MHZ



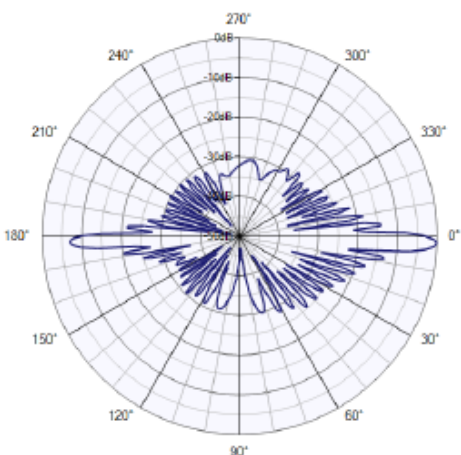
ELEVATION PATTERN

1°, 805MHZ



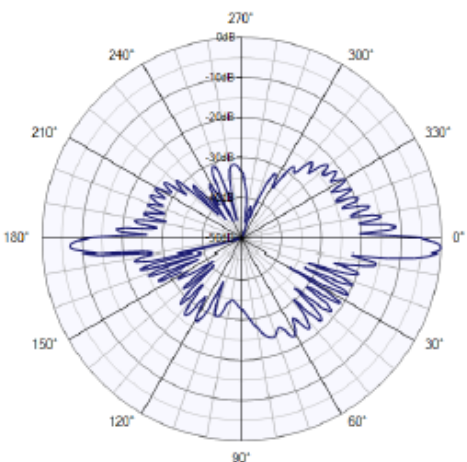
ELEVATION PATTERN,

2°, 805MHZ



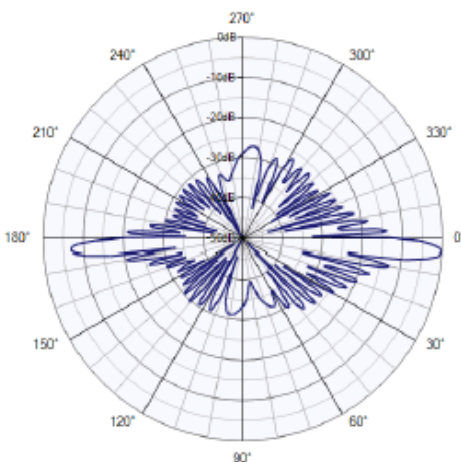
ELEVATION PATTERN

3°, 805MHZ



ELEVATION PATTERN

4°, 805MHZ



ELEVATION PATTERN

5°, 805MHZ

