



12 dBd HD Deepwave Antenna, Directional (A) Pattern, 740 - 870MHz

Model: 104DW-81-14-xx-xx
DS040364-1



Description

- The Deepwave Series colinear antennas are designed for LTE/GSM applications where a durable, high-performance, and directional antenna is required.
- The center-fed dipole design and feed network provide a stable radiation pattern across a wide bandwidth, allowing tilted beam designs to be effectively employed without large pattern distortions, and fills the lower pattern nulls.
- A reflector is used to achieve a directional radiation pattern with high front-to-back ratio.
- High-quality materials and manufacturing techniques ensure excellent intermodulation performance and wide bandwidth characteristics for multi-channel trunked radio communication systems.

Electrical Specifications

Parameter	Value
Frequency	740 - 870 MHz
Max. Input Power	600 W
Polarisation	Vertical
Peak Instantaneous Power (PIP)	25 kW
3 dB Beamwidth, E-Plane	$3^{\circ} \pm 1^{\circ}$
3 dB Beamwidth, H-Plane	$220^{\circ} \pm 2^{\circ}$
Impedance	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

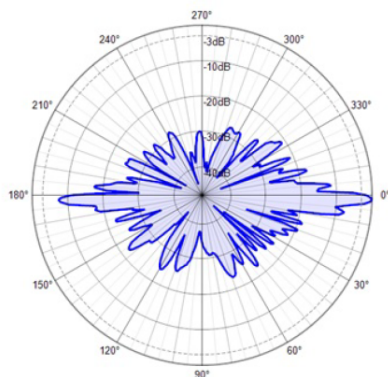
Parameter	Value
Connection(s)	104DW-81-14-xx-D7: 7/16 DIN Female 104DW-81-14-xx-D7: 4.3/10 DIN Female
Materials	Antenna Base: Aluminum LM25 Shroud: GRP tube 128 mm dia. Radiating element: Brass
Mounting	Flanged base with 6 hole fixing on 190.5 mm PCD
Length	5244 mm (206.5 in)
Wind Load	1264 N (160 km/h)
Weight	46 kg (101.4 lb)

Environmental Specifications

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

Model	Description
104DW-81-14-00-D7	0° Tilt, 7/16(f)
104DW-81-14-01-D7	1° Tilt, 7/16(f)
104DW-81-14-02-D7	2° Tilt, 7/16(f)
104DW-81-14-03-D7	3° Tilt, 7/16(f)
104DW-81-14-04-D7	4° Tilt, 7/16(f)
104DW-81-14-05-D7	5° Tilt, 7/16(f)
104DW-81-14-00-D4	0° Tilt, 4.3/10(f)
104DW-81-14-01-D4	1° Tilt, 4.3/10(f)
104DW-81-14-02-D4	2° Tilt, 4.3/10(f)
104DW-81-14-03-D4	3° Tilt, 4.3/10(f)
104DW-81-14-04-D4	4° Tilt, 4.3/10(f)
104DW-81-14-05-D4	5° Tilt, 4.3/10(f)
91-00-104A-1	Pole Mount Adaptor

E-PLANE, 805 MHZ



H-PLANE, 805 MHZ

