

11 dBd HD Omni Deepwave Antenna

740–870 MHz Null Fill

Model: 104DW-81-11-xx-xx
DS040363-1C



Description

- The Deepwave Series colinear antennas are designed for LTE/GSM applications where a durable and high-performance antenna with controlled null fill is required.
- The center-fed dipole design and feed network give a stable radiation pattern across a wide bandwidth and allow tilted beam designs to be employed without large pattern distortions.
- 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
Omni Deviation	$< \pm 1$ dB
Polarisation	Vertical
Peak Instantaneous Power (PIP)	25 kW
3 dB Beamwidth, E-Plane	$3^\circ \pm 1^\circ$
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	11 dBd (13.2 dBi) Nominal
VSWR	$< 1.5:1$
Lower Sidelobe Control	25% Null Fill
Passive Intermodulation	-153 dBc (3rd Order, 2 x Tx @ 43 dBm)
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)

Environmental Specifications

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



Mechanical Specifications

Parameter	Value
Connection(s)	104DW-81-11-xx-D7: 7/16 DIN Female; 104DW-81-11-xx-D4: 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	946 N (160km/h)
Weight	32 kg / 70.55 lb

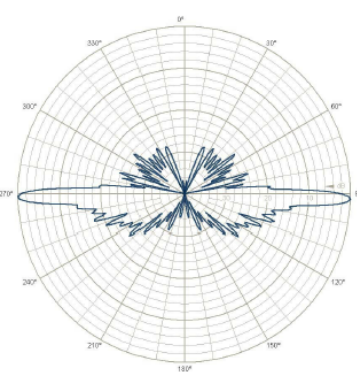
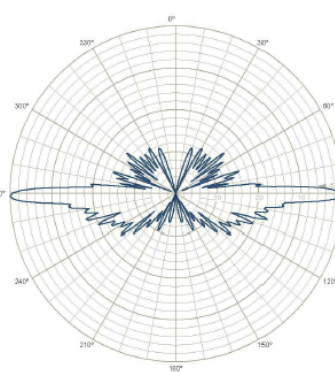
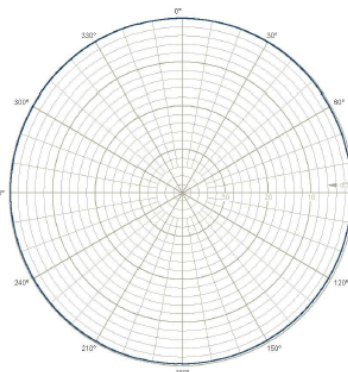
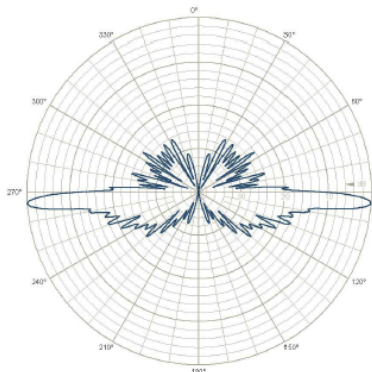
Model	Description
104DW-81-11-00-D7	0° Tilt, 7/16(f)
104DW-81-11-01-D7	1° Tilt, 7/16(f)
104DW-81-11-02-D7	2° Tilt, 7/16(f)
104DW-81-11-03-D7	3° Tilt, 7/16(f)
104DW-81-11-04-D7	4° Tilt, 7/16(f)
104DW-81-11-05-D7	5° Tilt, 7/16(f)
104DW-81-11-00-D4	0° Tilt, 4.3/10(f)
104DW-81-11-01-D4	1° Tilt, 4.3/10(f)
104DW-81-11-02-D4	2° Tilt, 4.3/10(f)
104DW-81-11-03-D4	3° Tilt, 4.3/10(f)
104DW-81-11-04-D4	4° Tilt, 4.3/10(f)
104DW-81-11-05-D4	5° Tilt, 4.3/10(f)
91-00-104A-1	Pole Mount Adaptor

E-PLANE, 780 MHZ, 4° TILT

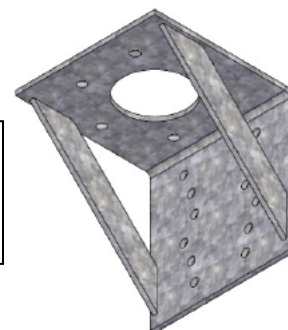
H-PLANE, 780 MHZ

E-PLANE, 780 MHZ, 1° TILT

E-PLANE, 780 MHZ, 2° TILT



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



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