

# Wide-Band LTE/5G Omni Antenna DATASHEET



**Part Number**  
Horizontal - NWT-ANT-638-2V

**Product Description**  
Our wide-band 5G/LTE, omnidirectional antenna provides the perfect balance between gain and vertical coverage. The wide vertical beamwidth allows it to reach great depths in open pit mining and similarly challenged topologies. The rugged design and build quality were created with heavy machinery in mind. These antennas are purpose built for industrial networks.

- Product Overview**
- Single model for the entire Sub-6ghz 5G/LTE frequency range reduces stocking SKUs for spare inventory
  - Wide vertical beamwidth, ideal in topology with broad variations in elevation
  - Low VSWR, and stable gain across entire working frequency range
  - Optimal pattern plots across entire working frequency range, which ensures excellent RF coverage in all directions

## ELECTRICAL SPECIFICATIONS

<b>Frequency Band</b>	MHz	698-960	1710-2700	3400-3800
<b>Gain (Average)</b>	dBi	2.3	2.5	2
<b>Polarization</b>		Vertical	Vertical	Vertical
<b>H-Plane 3dB Beamwidth</b>	Degree	360°	360°	360°
<b>E-Plane 3dB Beamwidth (Avg)</b>	Degree	75°	70°	80°
<b>Azimuth Plane Ripple</b>	dB	75	90	
<b>VSWR</b>		< 2.0	< 1.5	< 1.8
<b>Return Loss (typical)</b>	dB	-10.88	-13.9	-11.7
<b>Max Input Power per Port</b>	W		30	
<b>Impedance</b>	Ohms		50	

## MECHANICAL CHARACTERISTICS

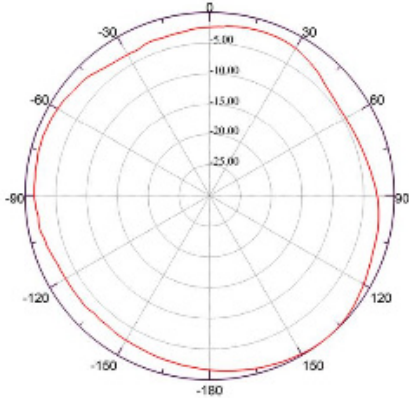
<b>Antenna Size</b>	60mm x 205mm / 2.36" x 8.07"
<b>Mounting Type</b>	Pipe Mount (U bolt or Hose Clamp)
<b>Mounting Mast size</b>	30mm - 65mm / 1.18" - 2.55"
<b>Antenna Color</b>	Black
<b>Connectors</b>	N Female
<b>Vibration Testing</b>	IEC 60068-2-6 IEC 60068-2-64 IEC 60068-2-27 IEC 60068-2-31
<b>Weight</b>	0.85kg / 1.87 lbs (U bolt) ; 0.54kg / 1.19 lbs (hose clamp)
<b>Packaging</b>	Carton
<b>Single Unit</b>	Retail Box: 90mm x 75mm x 241mm / 3.54" x 2.95" x 9.49"
<b>20 Units</b>	Carton Box: 380mm x 260mm x 400mm / 14.96" x 10.2" x 15.75"

## ENVIRONMENT

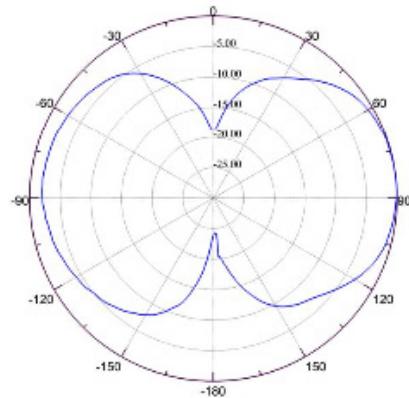
<b>Waterproof level</b>	IP66
<b>Operating Temp Range</b>	-40°C To +60°C / -40°F To 140°F
<b>Salt Fog Exposure</b>	120 hour
<b>Wind Velocity Survival Rating</b>	100 mph / 160km/h
<b>Wind Velocity Operational</b>	100 mph / 160km/h

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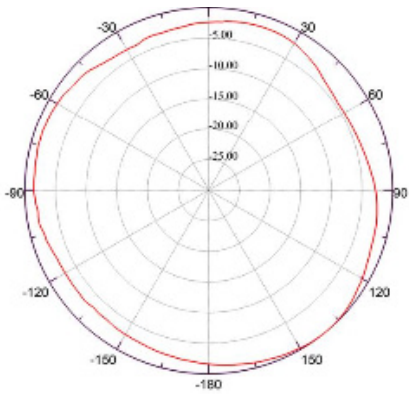
# Pattern Plots



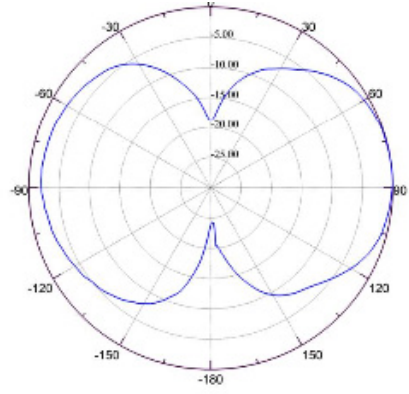
698Mhz H-Plane



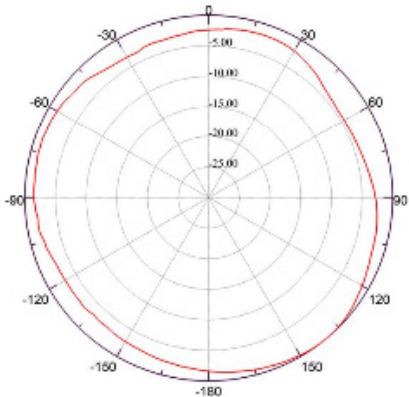
698Mhz E-Plane



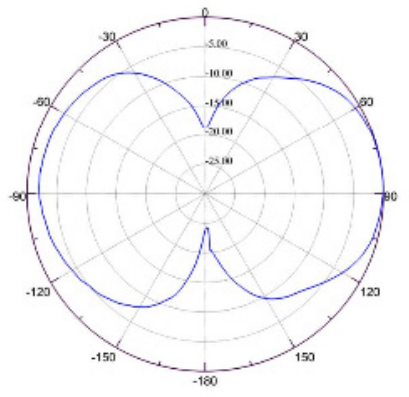
1700Mhz H-Plane



1700Mhz E-Plane



3800Mhz H-Plane

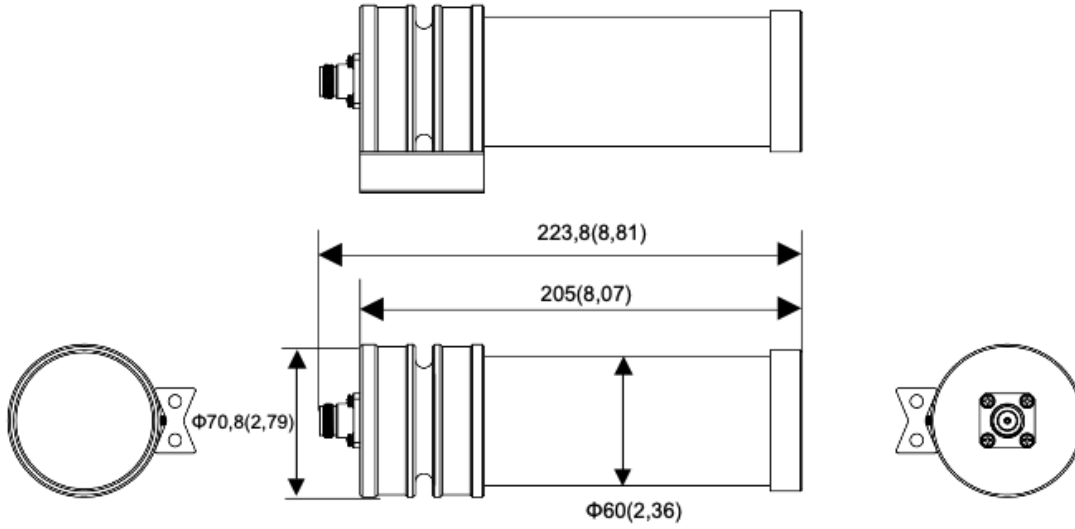


3800Mhz E-Plane

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# Mechanical



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