



**Description** : LTE Direct Mount

Series: DISC

PART NUMBER: DSC11001DM



## Features:

- LTE 4G antenna:
  - 698-960/1710-2700
- Gain 2 / 5 dBi
- Diameter 100mm
- Height 34.8mm
- Cable RG174
- Connector SMA male
- IP67

## **Applications:**

- 4G LTE
- Cat M1 and Cat 1 Devices
- 2G / 3G radios
- Vehicular use
- Utility boxes
- Smart metering

#### All dimensions are in mm / inches

#### Issue: 2041

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Preliminary



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### **ELECTRICAL SPECIFICATIONS**

Antenna Type	PIFA
Frequency	698-960/1710-2700MHz
Nominal Impedance	50 Ω
Return Loss	698-960 -6dB/1710-2700 -8dB
Radiation Pattern	Omni
Gain (Min)	698-960 2dBi / 1710-2700 5dBi
Efficiency(Min)	698-960 38%/ 1710-2700 50%
Polarization	Linear Vertical

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### **MECHANICAL SPECIFICATIONS**

Antenna Color / Material	Black
Connector type	SMA Male
Cable type	RG-174, Black
Cable length	500mm
Fixing system	Direct Mount
	P.S. requires a 3/4" (19mm) hole
	in the mounting surface
Connector retention	30 N
Strain relief	30 N, applied to cable along axis
	and perpendicular to cable entry

### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-40 ~ 85° C
Storage Temperature	-40 ~ 85° C
Ingress Protection	IP67
Wind-loading	160 km/h
RoHS Compliant	Yes

Preliminary RoHS

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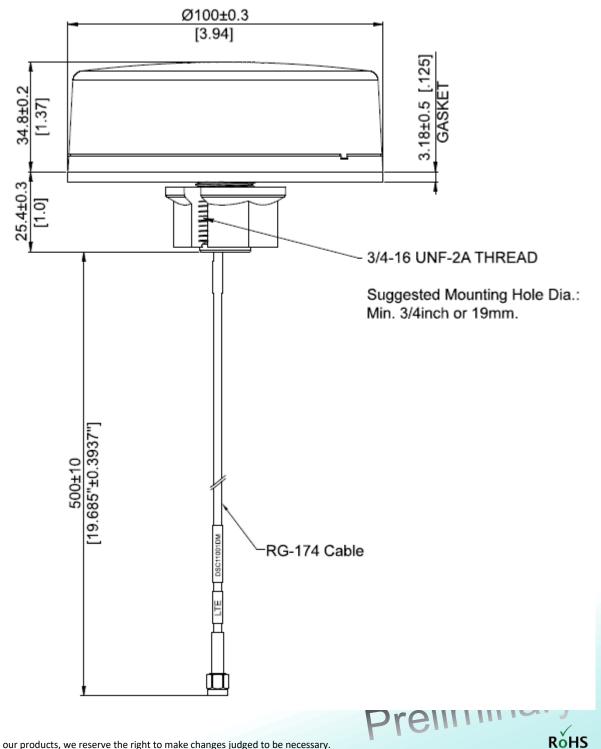


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**MECHANICAL DRAWING** 



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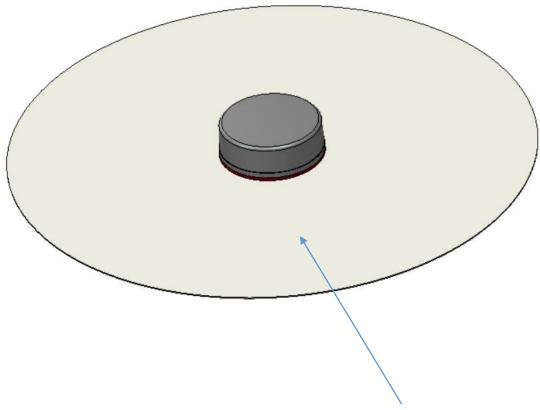


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**TEST SETUP** 



# Diameter: 500 mm ground pane

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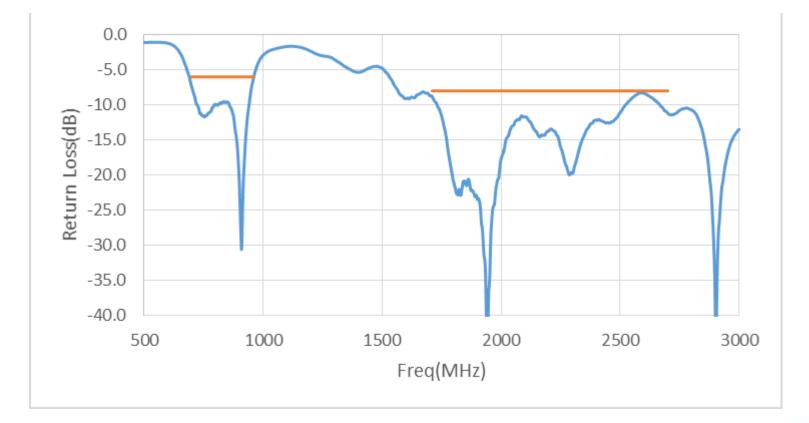
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### CHARTS

# **Return Loss**



## All data test with 500mm length cable

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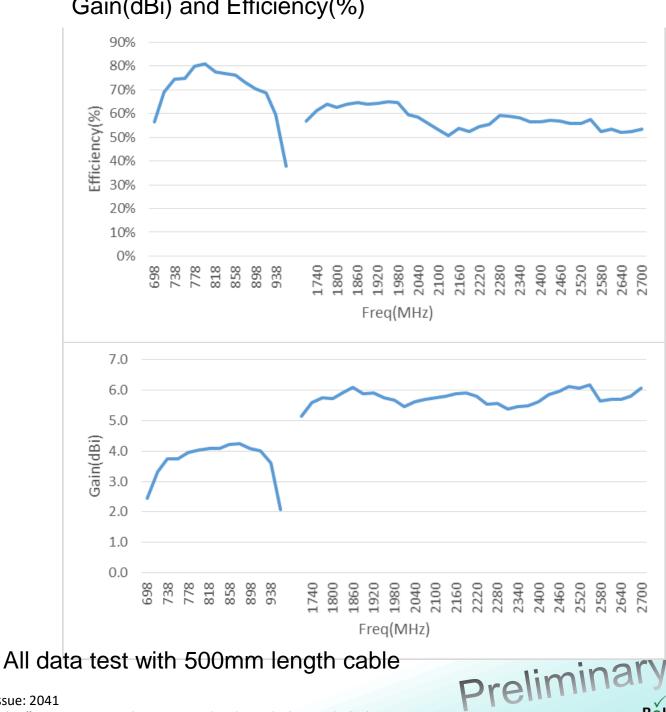


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### **CHARTS**



## Gain(dBi) and Efficiency(%)

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RoHS



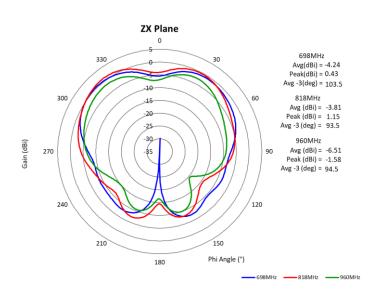
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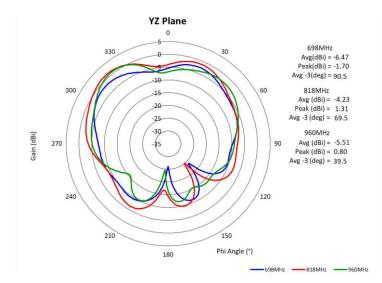
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### CHARTS

## **Radiation Pattern**





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All data test with 500mm length cable

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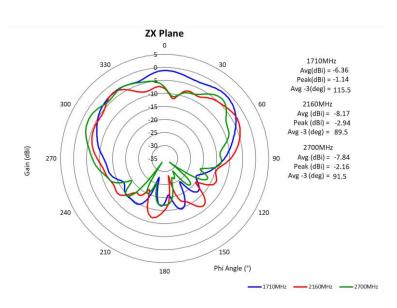
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### CHARTS

## **Radiation Pattern**



1710MHz 330 on Avg(dBi) = -6.13Peak(dBi) = -0.96 Avg -3(deg) = 98.5 2160MHz 300 Avg (dBi) = -9.52 Peak (dBi) = -3.86 Avg -3 (deg) = 72.5 -25 2700MHz Gain (dBi) Avg (dBi) = -8.63 270 90 Peak (dBi) = -1.74 Avg -3 (deg) = 36.5 240 120 210 150 Phi Angle (°) 180 -1710MHz -2160MHz -2700MHz

YZ Plane

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RoHS

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All data test with 500mm length cable

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## PACKAGING

- 1 antenna packed in a foam bag
- 12 foam bags of antennas packed in a carton
- 1 label on each carton with part number, description, date code.

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