

Production Name	Production Number	Version
GSM Flat Antenna	DL-GSM-SMAJZG1.5-WT	V1.0

1. Antenna Characteristics

No.	Item	Specifications
1	Range of Receiving Frequency	824~960 1710~2400MHz
2	V.S.W.R.(in Center Frequency)	≤2.0
3	Gain (Zenith)(dBi type)	>2.0
4	Radiation Pattern	Omnidirectional
5	Power Capacity	50
6	Polarization	Vertical
7	Connector Type	SMA Gold-plated straight head
8	Size	120*20*5mm
9	Color	Black
10	Weight	≥30g

2. Mechanical Specifications

Size	120*20*5mm	Mounting	Stick
Weight	≥30g	Connector	SMA
Color	Black	Cable	RG174 - 3m
Operating Temp.	-40°C~85°C	Storing Temp.	-45°C~85°C
Operating Humidity	0%~95%	Storing Humidity	0%~95%

3. RG 174 (Belden Standard)



3.1 Structure Parameter

Item	Materials	Diameter(mm)
1. Inner Conductor	Bare Wire	1/0.45
2. Nonconductor	Solid Polyethylene (PE)	1.50-1.51
3. Outer conductor	Copper Wire Braiding(64 braided copper wire)	1.9-2.0
4. Sheath	Black Sheath	2.85-2.90

3.2 Electrical Performance Parameter

Capacitor(pF/m)	101.05
Impedance(ohm)	50
Rate(%)	66
Bend Radius(mm)	10
Maximum Working Voltage (VMS)	1500
Maximum Operating Frequency(MHz)	1000
Operating Temperature Range(°C)	-20 ~ +80
Woven Filament Elongation (%)	≥10
Tension of Finished Product Line (N)	≤140
Interference Signal Masking Rate of Finished Cable (%)	≥95

3.3 Attenuation (Representative Value)

Frequency (MHz)	Attenuation (≧ dB/m)
100	0.255
400	0.532
1000	0.860

4. SMA head Characteristics

4.1 Materials and Coating

No.	Part Name	Material	Cladding Material	Remarks
1	Inner Conductor	Brass Wire	Gold-Plated	Hard Gold
2	Nonconductor	Teflon		
3	Shell	Brass (HPb59-1)	Gold-Plated	Hard Gold

4.2 Electric Property

No.	Test Items	Technical Index	Remarks
1	Characteristic Impedance	50Ω	
2	Temperature Range	-65~+165℃	
3	Frequency Range	0~12GHZ	
4	Medium Pressure	1000V(rms)	
5	Contact Resistance	Inner Conductor≤3mΩ Outer Conductor≤2mΩ	
6	Insulation Resistance	≥5000MΩ	
7	V.S.W.R	≤1.25(Flexible Cable)	
8	Salt Spray Test (hour)	24	

4.3 Mechanical Property

No.	Mechanical Property	Technical Index	Remarks
1	Mechanical Endurance	≥500 time	

5. Product Picture



6. Structure Dimension Diagram (unit: mm)

