

WA.0017.LT.MBS

GNSS/LTE/WIFI ANTENNA SPECIFICATION

1. Application:

This application shall apply for antenna unit which shall be used with an engine for automobile

2. Appearance:

Antenna Unit (with radome, connector, and cable – refer to an attached drawing)

Dimensions	Φ49.5*48.4 mm
Radome	#T1W
Output Connector	SMA
Cable	RG-174 (black)

3. Operating Condition:

Operating Temperature	-40 ~ +85°C
Relative Humidity	20 ~ 95% RH

4. Storage Condition:

Storage Temperature	-40 ~ +85°C
Relative Humidity	20 ~ 95% RH
Recommended Storage condition	Store in room condition as listed below: Temperature -20°C ~ +45°C, Humidity 80% Max.

5. Electrical Specification:


* All value are defined at 25±15°C, 65±20 % RH, power handling 10 watt, air pressure 960 ±100 HPA unless otherwise noted.

* Antenna characteristics are measured with test housing in an anechoic chamber.

5-1 GNSS Antenna

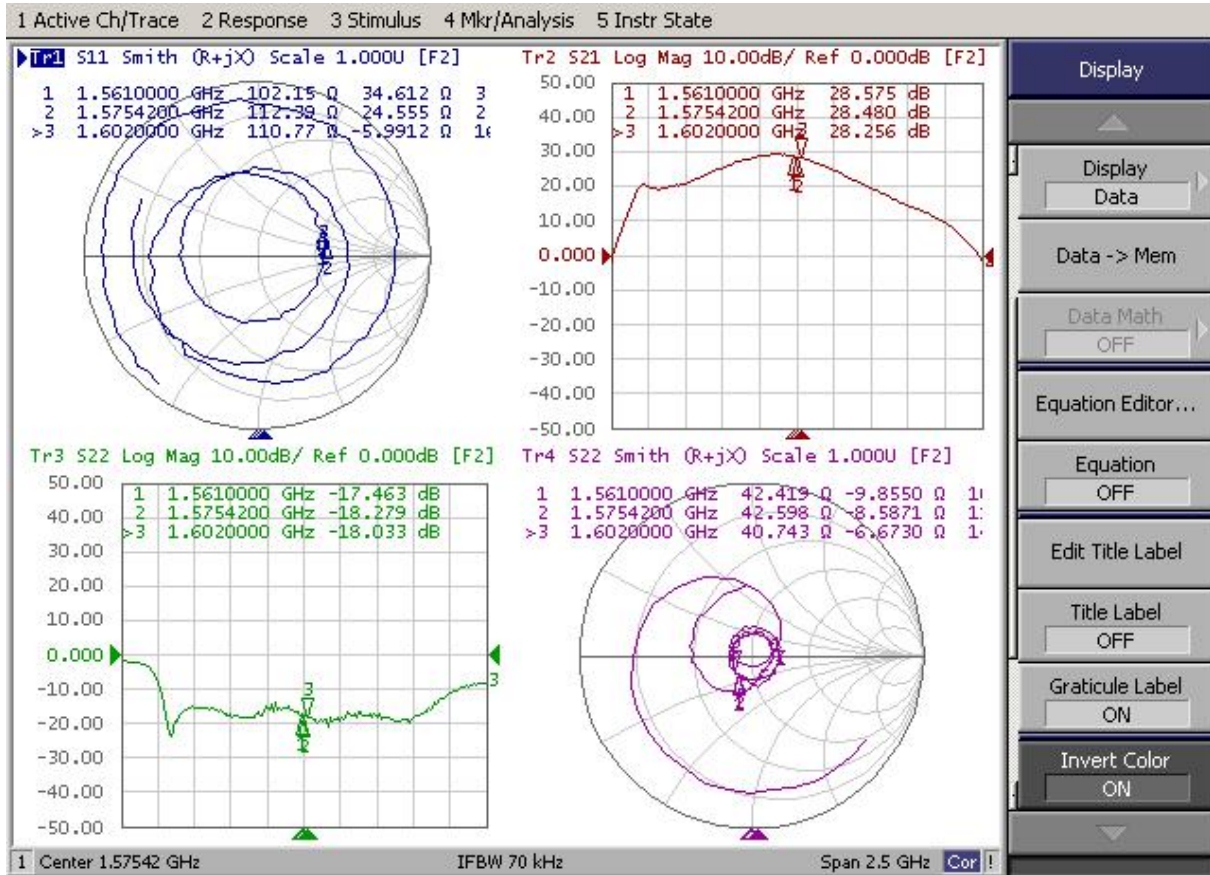
5-1-1 PATCH

Characteristics		Specification
Frequency Range		1560MHz~1575MHz
Center Frequency		1568 MHz
Bandwidth (10dB return loss)		20 MHz
Zenith Gain	1561.098MHZ	3.0 dBic typ.
	1575.42 MHz	3.0 dBic typ.
Polarization		R.H.C.P.

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5-1-2 GNSS LNA

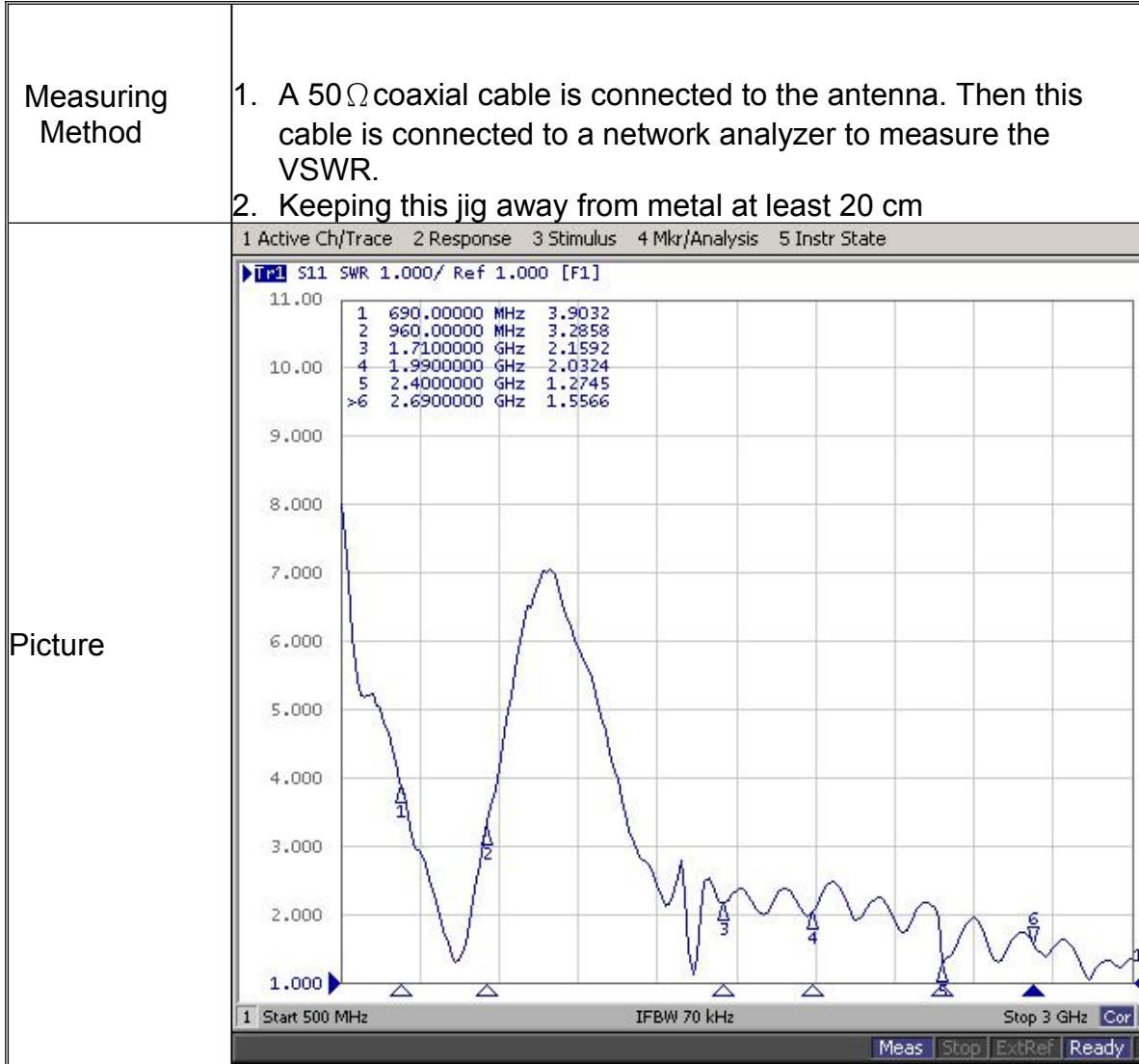
Characteristics	Specification
Frequency Range	1560MHz~1580MHz
Gain	28 dB TYP
Noise Figure	<1.5 dB
Output V.S.W.R	2.0 max
Operation Voltage	3.3 V
Current	<20 mA



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5-2 LTE Antenna

Frequency Band(MHz)	690	960	1710	1990	2690
Typical Value:	3.9	3.2	2.1	2.0	1.5



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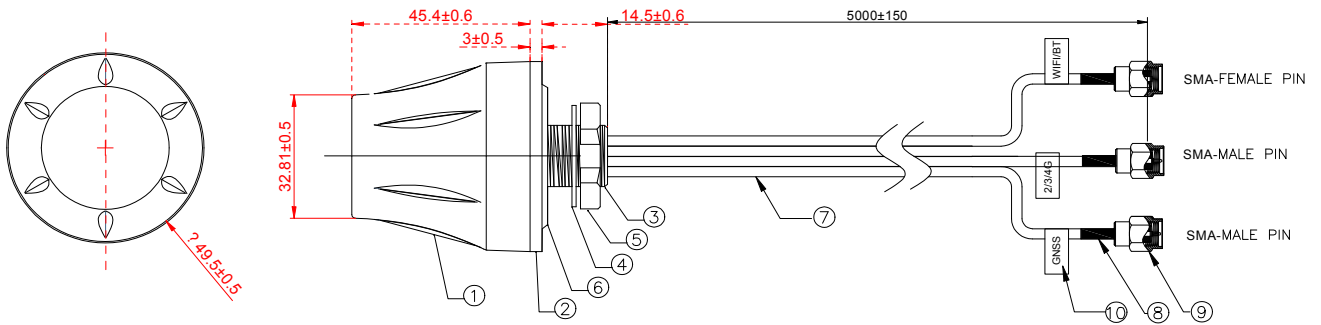
5-3 WIFI Antenna

Frequency Band(MHz)	2400	2450	2500
Typical Value:	1.3	1.5	1.1

Measuring Method	<p>3. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR.</p> <p>4. Keeping this jig away from metal at least 20 cm</p>
Picture	

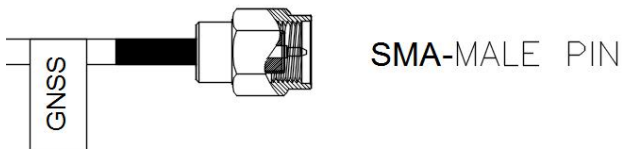
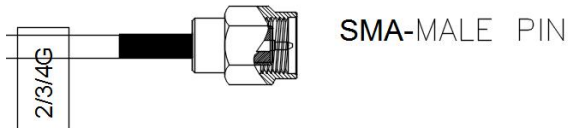
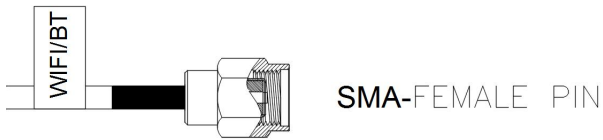
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6. Antenna Dimension:



⑩	标签	频率识别标签	3	PCS
⑨	SMA 接头	SMA公头	3	PCS
⑧	热缩管	Ø3.5黑 L=20mm	2	PCS
⑦	RF174同轴电缆	RF174线 黑色 L=235	5	MM
⑥	O形圈	有机硅胶 黑	1	PCS
⑤	螺母, M12的剪纸	镀铜-镍	1	PCS
④	多齿垫圈	镀铜	1	PCS
③	短螺纹	黄铜镀镍	1	PCS
②	外壳底部	ABS 黑色	1	PCS
①	外壳上部	ABS 黑色	1	PCS
ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	QTY REQD	UNIT
PARTS LIST				

7. Connector appearance: SMA



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