1. ELECTRICAL SPECIFICATIONS

NO.	Part Number	Outline Dimension	Ground Plane
1-1	GL1575S18T2	18*18*2mm	On the PCB board
			from customer
1-2	Center Frequency	1575.42-1610	
1-3	Bandwidth	34.58MHz	
1-4	Impedance	50 Ω	
1-5	Gain @ Zenith	1.5dBi typical	
1-6	Frequency Temperature Coefficient	0±10 ppm/℃	
1-7	Return Loss @fo	20dB min.	
1-8	V.S.R.W	1.5 max.	
1-9	Axial Ratio @fo	5.0dB max	

2. STRUCTURE AND MATERIAL

No.	Description	Structure and material
2-1	Antenna Substrate	Dielectric Ceramics
2-2	Pin	Copper
2-3	Electrode	Ag plated
2-4	Ground Base	Ag plated

3.PHYSICAL DIMENSIONS



4.ENVIRONMENTAL SPECIFICATIONS

Standard Condition : Temperature range:25±3°C

Relative Humidity range: 55~75%RH Operating Temperature range:-40 °C~+85 °C Storage Temperature range: -40 °C~+100 °C

4.1 High Temperature Endurance

The device should satisfy the specification in Table 1 after exposed to temperature $85\pm5^{\circ}$ C for 24 ± 2 hours and 1~2 hours recovery time under normal temperature.

4.2 Low Temperature Endurance

The device should also satisfy the specification in Table 1 after exposed to the temperature $-40^{\circ}C \pm 5^{\circ}C$ for 24 ± 2 hours and $1 \sim 2$ hours recovery time under normal temperature.

4.3 Moisture Proof

The device should satisfy the specification in Table 1 after exposed to the temperature 40 ± 2 °C and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

4.4 Vibration Resist

The device should satisfy the specification in Table 1 after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

4.5 Drop Shock

The device should satisfy the specification in Table 1 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

4.6 Temperature Cycle Test

The device should also satisfy the specification in Table 1 after exposed to the low temperature -25 $^{\circ}$ C and high temperature +85 $^{\circ}$ C for 30 \pm 2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.