

The Antenna Company 1100 Maplewood Drive Itasca, IL 60143	Engineering Specification - NAMPS/GSM Combination Saucer	
	ES no. 040011A000	Revision A
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### 3. Requirements:

#### 3.1 Electrical

##### 3.1.1 Bandwidth

824 - 849 MHz transmit  
869 - 894 MHz receive  
872 - 916 MHz transmit  
916 - 960 MHz receive  
890 - 915 MHz transmit  
935 - 960 MHz receive

##### 3.1.2 Return Loss

VSWR  $\leq$  1.5:1 over specified bandwidth

##### 3.1.3 Nominal Impedance

50  $\pm$  2.5  $\Omega$

##### 3.1.4 Power Rating

3 Watts

##### 3.1.5 Polarization

vertical

##### 3.1.6 Antenna Gain

0 dBi average in azimuth plane

#### 3.2 Durability Tests

##### 3.2.1 Temperature Shock

Assembly to be cycled between extremes of 85°C and -40°C, with a one-hour dwell time at each extreme, and a maximum ten-second transition between the two. Ten complete cycles to be performed with no visible structural damage or change in VSWR greater than  $\pm$  10%.

Temperature shock testing to be performed with a Tenney T5TS-73200C Thermal Shock Chamber (or comparable instrument).

##### 3.2.2 Salt Fog

Assembly to be subjected to 500 hours of 5% neutral salt (NaCl) fog exposure at 35  $\pm$  2°C with no visible deterioration of the exterior finish or change in VSWR greater than  $\pm$  10%.