

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 Ω

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%.