



QUADNOVA® Custom Quad-band Antenna

Antenova's QUADNOVA® quad-band antenna covers the AMPS 850, GSM 900, DCS 1800 and PCS 1900 bands. This small and efficient antenna is suitable for European and American (CDMA/TDMA 850 and 1900) handsets, smartphones and PDA applications.

Antenova's High Dielectric Antenna (HDA®) technology attains low volume and high efficiency. Samples of this antenna integrated into specific handset cases can be prepared upon request and made available for independent testing.

Benefits:

- Low volume and small size
- High efficiency
- Multi-band capability
- Surface mount attachment available
- Internal antenna



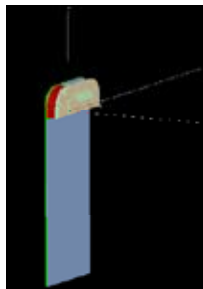
electrical

FREQUENCY RANGES

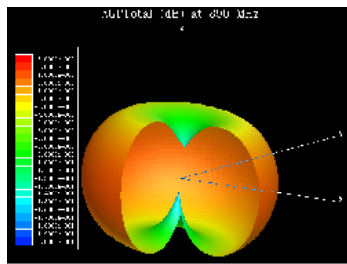
EGSM :	800MHz - 960MHz
AMPS :	824MHz - 890MHz
GSM :	890MHz - 960MHz
DCS :	1710MHz - 1880MHz
PCS :	1850MHz - 1990 MHz
PEAK GAIN ELEMENT :	
[lower band] :	2dBi
[upper band] :	4dBi
ELEMENT VSWR :	Better than 3:1
IMPEDANCE :	50Ω, real

mechanical

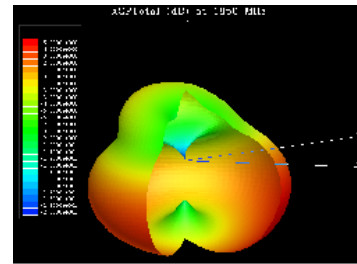
ELEMENT VOLUME :	<3.5cc
MAXIMUM HEIGHT :	7mm
ELEMENT SUBSTRATE :	0.8mm FR4
GROUND PLANE SIZES	
AVAILABLE :	90mm x 50mm 100mm x 45mm
MOUNTING :	SURFACE MOUNT
CLIP FIT ANTENNA ASSEMBLY	



Orientation of the antenna



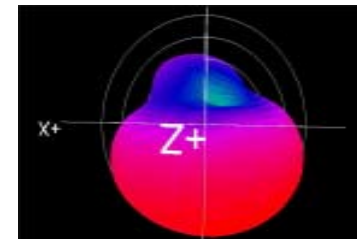
Simulated 3d gain plot at 890MHz



Simulated 3d gain plot at 1850MHz

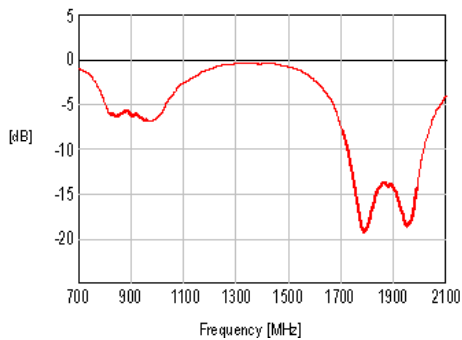


Measured 3d gain plot at 890MHz

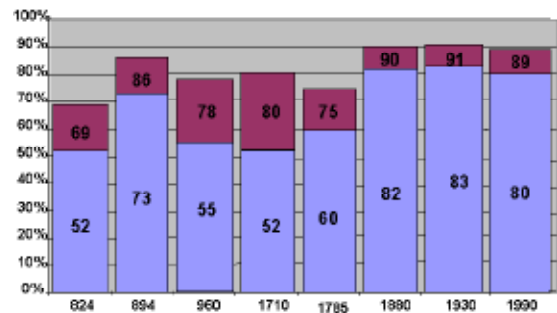


Measured 3d gain plot at 1850MHz

Graph showing return loss for all four bands



Measured antenna efficiency



Certificate No: 4598

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The information provided in this document was correct at the time of going to print