

可應用於無線手機之內藏式多頻天線設計 = Design of internal Multi-Band antennas for mobile handsets

賴彥儒、胡大湘；許崇宜

E-mail: 9901158@mail.dyu.edu.tw

摘要

本篇論文主要是設計應用於手機的內藏式手機天線，本文中設計了二支多頻帶天線，而這二支天線必須包含GSM850, 900, DCS1800, PCS1900和UMTS2000等五個頻帶，其中第一支天線不僅包含了上述的五個頻帶外，還多包含了2.4 GHz的WLAN共六個頻帶，第二支天線則是多包含了1.5GHz的GPSL1頻帶，換言之本論文所設計的天線都可含蓋六個商用頻帶。本論文的二支天線是利用電單極(Monopole)和電偶極(Dipole)二種的結構的組合來達到所要求的頻帶，這二支天線皆是用低價位的FR4基板來進行設計，此天線具低價位，體積小，重量輕，製作簡單等優點。

關鍵詞：電單極；電偶極

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