

GPS應用之新式圓極化單極天線

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摘要

本論文提出一種微帶線饋入的新式圓極化印刷天線，可運用於全球衛星定位系統(GPS)接收器上。此天線是由兩個正交的單極天線組成，產生出兩個正交且相等振幅的線性極化波，並且於操作頻帶上有90度的相位差。比起典型的GPS貼片天線，被提出的天線有非常寬的軸比頻寬。另外，此天線可以簡單的設計，低成本的製造，並且容易整合於相關的電路板。本論文設計並製作出一個天線原型，根據實驗的證明，此天線除了擁有符合規格之要求外，對於在製造上的誤差具有低敏感性的優點。

關鍵詞：全球衛星定位系統、圓極化天線、單極天線

目錄

封面內頁 簽名頁 授權書.....	iii	中文摘要.....	iv	ABSTRACT.....	v	誌謝.....	vi
目錄.....	vii	圖目錄.....	viii	第一章 緒論		1.1 前言.....	1
1.2 研究動機.....	2	1.3 GPS簡述與應用.....	2	1.4 論文架構.....	3	第二章 天線極化原理	
2.1 天線極化概述.....	5	2.2 線性極化.....	7	2.3 圓形極化.....	7	2.4 橢圓極化.....	8
第三章 GPS應用之新式圓極化單極天線		3.1 GPS天線種類概述.....	11	3.2天線初步設計構想.....	13	3.3 GPS應用之新式圓極化單極天線模擬設計.....	16
3.4 GPS應用之新式圓極化單極天線各項參數模擬分析.....	18	3.5 GPS應用之新式圓極化單極天線實作與量測.....	22	3.6 天線之右旋圓極化與左旋圓極化互換.....	25	3.7 天線基板於製造時的些許誤差之影響.....	29
3.8 GPS應用之新式圓極化單極天線探討結果.....	32	第四章 降低金屬接地面對天線之影響		4.1 金屬接地面大小對天線之影響.....	33	4.2 降低不同基板大小對天線之影響.....	36
4.3 降低金屬接地面對天線影響之實作與模擬驗證.....	45	第五章 結論.....	49	參考文獻.....	51		

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