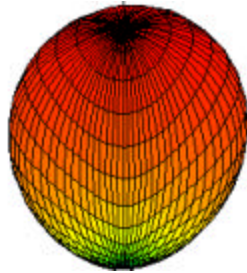


Fourpoint Antenna

Description

The Fourpoint antenna is a compact, low-profile and dual-polarized broadband antenna with a small size of $0.32 \times 0.32 \lambda$. It is easy to design and fabricate the antenna by etching it on a dielectric material. High gain of 8 ~ 9 dBi can be achieved by backing with a ground plane.

The bandwidth of the Fourpoint antenna is about 2.7:1, covering several wireless bands such as AMPS, GSM, DCS and PCS simultaneously.



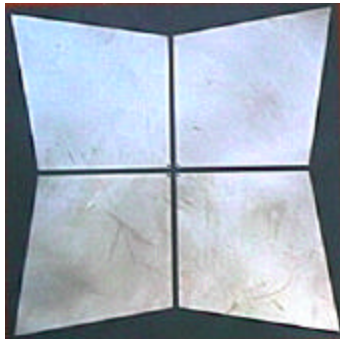
3D Radiation Pattern

Features and application

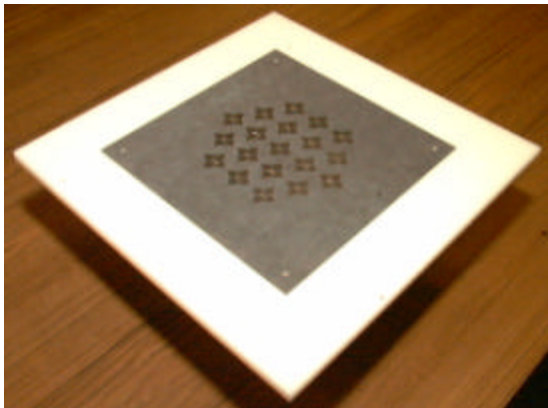
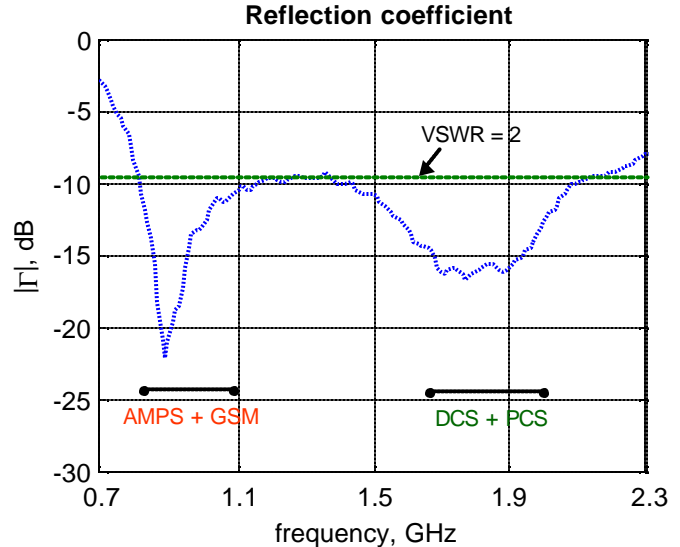
- Broadband, compact, low-profile and dual-polarized
- Uni-directional pattern
- Either dual-linear or circular polarization
- Base station antenna array for MMDS and LMDS
- Broadband phased antenna array

Specifications

- | | |
|---------------------|----------------|
| • Frequency | 0.81 ~ 2.2 GHz |
| • VSWR | 2:1 |
| • Typical gain | 8 ~ 9 dBi |
| • Nominal impedance | 50 ohm |
| • Size (W x H) | 4.5" x 4.5" |



Fourpoint antenna element



A prototype of Fourpoint antenna array

Patent application is filed for the Fourpoint antenna. All rights owned by Virginia Tech Intellectual Properties. <http://www.vtip.org/licensing/disclosures/00-141.htm>
 Inventors: Dr Seong-Youp Suh (suh@vt.edu) and Dr. Warren L. Stutzman (stutzman@vt.edu)

For more information, contact Michael J. Martin at 540-951-9376 or mike@vtip.org <http://www.vtip.org>