

### MULTI-BAND OMNIDIRECTIONAL IN-BUILDING ANTENNA

The widespread use of cellular phones and wireless network applications inside buildings has increased the need for antenna systems that can provide considerable gain over traditional dipole antennas.

Laird Technologies' in-building wireless antennas are particularly applicable in environments where aesthetics and wide angle coverage are necessary for successful wireless deployment. Their surprisingly small size allow the antennas to be hidden almost anywhere, providing an invisible solution for most applications.

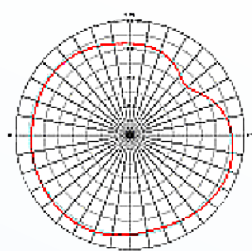
### FEATURES

- Surprisingly small size allows it to be hidden almost anywhere, providing an invisible solution for many applications.
- The field pattern is toroidal, providing omni-directional coverage in any plane around the long axis of the antenna, and two lobes in any plane parallel to the long axis.

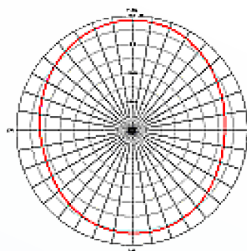
### MARKETS

- The omni-directional pattern is suited to a variety of uses, including handheld devices, in-building systems or other applications where mobility is a factor.

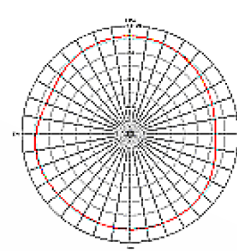
### ANTENNA PATTERNS



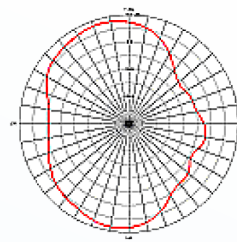
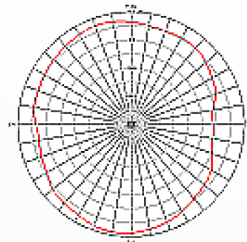
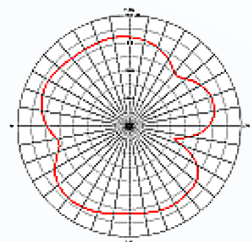
Azimuth



Elevation,  $\Phi=0$



Elevation,  $\Phi=90$



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# Multi-band MicroSphere Antenna

## IFMULT

| SPECIFICATIONS                |                                                                                                     |
|-------------------------------|-----------------------------------------------------------------------------------------------------|
| Element Type                  | Microstrip                                                                                          |
| Frequency Range               | AMPS 806-896 MHz<br>GSM 880-960 MHz<br>DCS 1710-1880 MHz<br>PCS 1850-1990 MHz<br>UMTS 1920-2170 MHz |
| Peak Gain                     | 3 dBi                                                                                               |
| Polarization                  | Linear                                                                                              |
| Impedance                     | 50 ohms                                                                                             |
| Maximum Input Power           | 50 watts                                                                                            |
| VSWR                          | 2:1                                                                                                 |
| Dimensions (L x W x H)        | 11.2 x 13.8 x .25 cm                                                                                |
| Housing                       | Acrylic                                                                                             |
| Operating/Storage Temperature | -40° to +70°C                                                                                       |

| MODEL #       | REFERENCE # | CONNECTOR             |
|---------------|-------------|-----------------------|
| IFMULT-NF00   | CAF94454    | N-Female              |
| IFMULT-SFRA00 | CAF94533    | R.A. SMA Female Panel |
| IFMULT-SF00   | CAF94362    | SMA Female Panel      |

### MOUNTING OPTIONS

- Includes nylon screws for mounting to ceiling tile or finished ceiling

ANT-DS-IFMULT 0909

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