## Challenge

One of our customers, a supplier of core technology, products and solutions for the biometric identification industry, manufactures products that fall into two categories: Information Security (fingerprint ID/training/scanner/reader products) and Security (fingerprint access control/locks/time attendance). These products are widely used by many companies in the finance, transportation, telecommunications, and government sectors.

Our customer required a dual band, PCB-style, Omni directional antenna for their application which involved a point-of-sale (POS) wireless handheld payment system. The antenna needed to be cost-effective, space saving, and provide seamless wireless connectivity in their OEM application.

## Solution

L-com was able to design a PCB Omni directional, 2.4/5.8 GHz, 3/5 dBi antenna that incorporates a three inch micro coaxial lead terminated with a U.FL type RF connector. The design also utilizes double coated tissue tape allowing the antenna to be affixed in place for the application. L-com's ability to design the product and provide samples in a minimal amount of time provided an advantage over the competition.

## Results

L-com's antenna met the size and performance requirements of our customer. The L-com design was tested against another manufacturer's antenna and L-com's antenna proved superior as the range of L-com's antenna far exceeded our competitors. Our customer was able to deliver a fully functional, comprehensive mobile POS payment solution to their customer within budget and ahead of schedule.

### Customer Profile

| Customer: Biometric Identification Products Manufacturer |
| Location: Hangzhou, China |
| Industry: Security/Identity |

### Challenge

- Develop a custom, small form factor PCB antenna
- Meet cost and delivery targets

### Solution

- Customized dual frequency PCB Omni antenna

### Results

- L-com was able to meet the customer's technical requirements, cost targets and delivery dates