# Case Study

**GEOSat Solutions** Provides Long Range WiFi Communications to Marine Vessels with L-com's Custom Omni Directional Antenna



## **Customer Profile**

Customer: GEOSat Solutions Inc.

Location: Hollywood, FL

Industry: Wireless Communications Integrator/Manufacturer

### Challenge

- Design a custom Omni directional antenna for outdoor marine use
- Meet price targets while maintaining rugged weatherproof design

#### Solution

 Custom Omni directional WiFi antenna designed for marine applications

#### Results

 GEOSat is now able to offer its customers a rugged, weatherproof WiFi communications system

## Challenge

GEOSat Solutions Inc. is a manufacturer and systems integrator for the marine industry, specializing in technical communications solutions. Founded in 1994, the company's total focus was on the emerging direct broadcast satellite services market. GEOSat's unique Marine-Sat antenna provides reliable satellite television reception while at the dock with a lightweight, portable sixteen-inch dish. In 1996, GEOSat Solutions developed a horizontally integrated, dual mode dish antenna that combines DBS television with L-Band satellite communications services utilizing two different satellites.

Today, GEOSat's primary focus is WAVE WiFi™ Internet access for vessels and marine facilities worldwide. Wave WiFi's five onboard WiFi models provide boaters with easy to use, long-range Internet access from shore-based 'HotSpots.' Wave WiFi Connex offers wireless instrumentation links for recreational and commercial vessels as well as marina operations.

GEOSat needed a rugged weatherproof Omni directional antenna for one of its latest wireless communication platforms. The antenna needed to be designed for use with the 2.4 GHz WiFi frequency band and employ all weather materials for harsh, outdoor marine use.

#### Solution

L-com's engineering team was able to develop a custom Omni directional antenna to meet GEOSat's exact requirements. The antenna features a Stainless Steel end cap and base as well as a durable UV-stable fiberglass radome for all weather operation. Additionally, the antenna features an integral N-female connector and rugged mast mounting bracket.

#### Results

GEOSat is now able to offer its customers a rugged, high performance WiFi communications system purpose built for harsh marine applications.















