

## Mobile Mark Antennas... Bring WiFi Connectivity to Intercity Bus Passengers



### THE CUSTOMER

SinglePoint Communications is focused on a very clear goal: giving people a way to connect when and where they're on the go. The company is a value-added integrator of all the systems needed to bring connectivity to all kinds of conveyances, whether it's the family camper or a cross-country bus. More than a distributor, the company serves its customers

with complete solutions, such as its suite of award-winning WiFi In Motion products, which acts as a bridge between vehicles and high-speed cellular data networks, delivering WiFi access and an Ethernet-based local area network (LAN) for connecting on-board systems.

### THE CHALLENGE

SinglePoint Communications was asked by a major American intercity bus line to provide a WiFi solution that would give passengers the ability to check email, upload photos, engage with friends on social media, download music and more, whether in a densely populated city or traveling through a remote rural area. The solution: SinglePoint's WiFi In Motion™, a family of multi-radio, rugged, in-vehicle mobile routers that deliver Ethernet, WiFi and GPS over a range of carrier-class backhaul networks.

WiFi In Motion mobile routers are compatible with a wide range of third-party antennas, so SinglePoint and its customer had many options to choose from. But certain stringent criteria needed to be met. A high-

performing antenna was required to pull in enough LTE bandwidth to ensure passengers would get a reliable signal regardless of the terrain the bus was passing through. The antenna needed to provide that performance despite some severe height restrictions that were imposed by the washing system used by the carrier to keep its buses sparkling clean. Several other requirements added up to a need for a partially customized Made in U.S.A. solution, including a specific cable length, special labeling, short lead times, and the ability to drop ship directly to the bus carrier's depots throughout the country. To meet these requirements, SinglePoint relied on solutions from Mobile Mark.

### THE SOLUTION

For its bus-carrier customer's WiFi In Motion mobile routers deployment, SinglePoint selected Mobile Mark's LTM series, which contain three or four separate antennas. The LTM300 series combine a GPS antenna with two MIMO LTE elements. The four-element LTM400 series solution incorporates GPS with a single (non-MIMO) WiFi element and two LTE MIMO elements.

In addition to the high-bandwidth antenna performance required by SinglePoint's customer, Mobile Mark was able to provide the form factor, cable specifications,

product labeling, and logistics capabilities that the bus carrier needed. The LTM antennas were supplied with 6-foot cables and without a rubber gasket at their base, as required by the bus carrier, and shipped directly to the carrier's depots with SinglePoint branded labeling and an installation guide that would allow local personnel to connect the antenna to the WiFi In Motion system. As an added benefit, the antenna does not require an external groundplane so it can be mounted to either a metal or a fiberglass roof.

### THE CUSTOMER EXPLAINS

"We knew that Mobile Mark could provide us with a high-performing antenna solution from the point of view of delivering a strong signal to our WiFi In Motion system, but what our decision really came down to was being able to meet the very specific form factor requirements of our customer. We really appreciated that Mobile Mark was willing to work with us on specific requests like blind shipping and providing unique SKUs. Mobile Mark was also able

to accommodate us with respect to the carrier's requirements for cable length and base construction, and the fact that their product is made in the U.S.A. was certainly another feather in Mobile Mark's cap."

"Mobile Mark has been very easy to work with and so far we've had a very positive response from our customer as well."

—Rob Taylor, CEO, SinglePoint

## Mobile Mark Antennas...

# More About Mobile Mark's LTM Antennas

### INFO

Mobile Mark's LTM301 Multiband Diversity/MIMO antenna contains three separate antennas, all in one compact antenna housing: two identical cellular and LTE 700 MHz elements and one GPS element.



**LTE MIMO** (multiple-input-multiple-output) modems offer greater speed and capacity than earlier generations of modems, but in order to ensure optimum performance the LTE MIMO system needs multiple antennas on both the transmission and receive ends.

The 3-element **LTM301** antenna is designed for fleet management systems that combine a GPS receiver with a 2-element LTE MIMO modem. For fleet management systems that add in a WiFi modem, the **LTM501** (for WiFi MIMO modems) and the **LTM401** (for non-MIMO WiFi modems) are recommended.

Measuring 5.5" (140mm) in diameter with a low profile of 2.38" (60.4mm), LTM series antennas take up significantly less space than multiple antennas.

The radome is available in either black or white. The antennas are available in either surface mount or mag-mount models. The antennas can also be configured for combined GPS and Glonass use.



**MobileMark**  
antenna solutions

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