



Antenna Solutions for
Cellular M2M Communications

While there are parallels from one M2M (Machine-to-Machine) network to another, each network is unique. There is a need to assess the challenges and choose the right tools; one important tool is the antenna.

Mobile Mark can help you optimize the system's performance by looking at the entire wireless system. We provide options for efficient performance from the device: embedded vs. external antenna choices, and we provide options for the network: directional vs. omni-directional. We also offer different mounting solutions.

Mobile Mark's broadband antennas cover all of the possible cellular frequencies from the established 850 & 1900 MHz bands to the new 4G LTE band at 700 MHz, and AWS bands at 1.7 & 2.1 GHz, and LTE plus at 2.5 GHz.

Industrial M2M Infrastructure

From network setup at construction sites or oilfields, to data transfer along a smart grid, industrial M2M networks require dependable data transfer. Mobile Mark offers a range of rugged omni-directional and directional site antennas designed to cover targeted areas, whether close-in or at a distance. Our antennas can meet industry specific features such as high voltage insulation or PTCRB requirements by Cellular Carriers.



Monitoring in Rugged Conditions

Mobile Mark has a track record of developing environmental-resilient antennas that protect against severe vibration, impact, water ingress or sea salt incursion. This can be achieved by over molding the antennas or filling the antenna housing with vibration absorbing material. Our antennas are built to be rugged and meet industry and military specification.

Data Transfer from Vehicles

Real-time data captured from moving vehicles needs to be transmitted to a central monitoring location. Mobile Mark offers solutions ranging from a simple GPS-only antenna for navigation to a Multiband antenna that combines several applications (Vehicle location and tracking, mobile telemetry and WiFi hotspots) in the same package. We also offer multi-element antennas that provide LTE MIMO and WiFi MIMO coverage.



Fixed Location M2M

Remote monitoring of devices in fixed locations often depends on time-sensitive data. Alerts from security cameras, or utility pole boxes contain critical information that needs to be acted on. Or, driver warning notices can be transmitted out to remotely located digital signs to update drivers of important traffic developments. Reliable connections are critical to ensuring this continuous flow of information.

Embedded Covert M2M Solutions

Some M2M solutions are placed in a tight space or in unusual settings, such as vending machines or wireless data terminal. Mobile Mark can help with off-the-shelf or custom designed embedded antennas. For applications requiring covert mounting, our low profile, impact resistant antennas can be mounted internally or externally. Solutions include the antenna board itself, or an antenna board in an over-molded, or a custom-shaped radome.



Mobile Mark's Engineering Technical Center provides stand-alone RF Electrical and Environmental testing services.

Our fully equipped testing facility includes a newly enlarged Anechoic Chamber. We offer Antenna Characterization data and reports, including Impedance Testing and Radiation Patterns.

We also conduct Environmental Testing based on Industrial & Military standards for Shock & Vibration; Water Ingress; Salt, Fog or Dust Ingress; and Temperature Cycling.

Visit www.mobilemark.com for details.



Industrial M2M Infrastructure	Monitoring in Rugged Conditions	Data Transfer From Vehicles	Fixed Location M2M	Embedded Covert M2M Solutions
<p>PN8 Series LTE Directional Panel 694-960 MHz & 1710-2170 MHz Single Element</p> 	<p>OD Omni-directional rugged, 2.4 GHz Data Transfer Antenna</p> 	<p>LTM601 Series 2x Cellular LTE, 3xWiFi, 1x GPS Six Cables, Surface mount Glonass Option</p> 	<p>LTB301 Series Multiband Cellular, 2x MIMO LTE GPS at 1575 MHZ</p> 	<p>EM Series Embedded Printed Circuit Board Flexible or Non-Flexible 2 dBi Gain</p> 
<p>PND Series Dual-Slant Panel. 2 Elements 8 dBi 694-960 MHz & 12 dBi 1710-2170 MHz</p> 	<p>Device Antenna Fixed Straight Position, Halfwave 649-2750 MHz IP67</p> 	<p>SMW Series, Surface Mount 3-cable, multiple combinations Cellular, GPS & WiFi Mag-mount Option</p> 	<p>LTM-PMK Pole mount kit for LTM Series Fits all LTM Style Antennas</p> 	<p>CVW Covert Series Broadband Cellular & GPS 694 MHz-2.7 GHz</p> 
<p>DOD3 MIMO Omni-Directonal, Cellular/LTE 694-960 & 1700-2700 MHz 2-3 dBi Gain</p> 	<p>RM Series Surface Mount Rugged Construction, Broadband 1.7-6.0 GHz, 3 & 5 dBi Gain</p> 	<p>LMW Series Surface Mount Broadband Cellular & GPS 4 dBi Gain & 5 dBi Gain</p> 	<p>SM-900/1900 Surface Mount 824-870 & 1850-1990 MHz Unity Gain</p> 	<p>CVL Covert Series Broadband Cellular 694-960 & 1700-2700 MHz 2 dBi gain</p> 