Antenna knowledge and solutions
When RFID theory meets practice
RFID technology allows us to identify, monitor, and track items ranging from medicines to fruit to parcels to people. But each application has its own quirks and challenges. Just when you have solved one RFID conundrum, it seems like another pops up.

Each potential market adds its own requirements to the RFID landscape. Requirements range from environmentally resilient products for Cold Chain Management to large-volume active tracking products for Homeland/Port Security to impact-resistant products for Distribution & Warehousing settings with heavy equipment and obstructed range.

Successfully taking RFID from theory to practice means finding the right partners, partners who have the knowledge and expertise to design the right products to get the job done.

Covert Installation & Smart Shelving
Low-profile antennas can be mounted in out-of-the-way spots. Their small size, rugged construction and Linear-Polarity make them ideal for close proximity settings such as smart shelf applications in retail or pharmaceuticals. Options are available for different settings, including groundplane independent models such as the CVO, which can be mounted to metal, wood or fiberglass.

CP Patch Antennas for all distances
Circularly Polarized Patch antennas generally provide the best coverage for an RFID Reader Antenna. The radiation pattern makes it possible to get reliable read capture rates when tags are coming from all directions. Antenna gain should be selected to match the desired read distance, whether reading close-up tags passing through a portal or tags at a distance coming through a dock-door, or even in a staging yard.

Heavy Duty & High Vibration Solutions
Some RFID installations require extremely durable antennas. Mobile Mark offers heavy-duty, impact resistant antennas that have passed rigorous Industry and Military standards for Shock & Vibration testing. They can be mounted in any setting (including in close proximity to metal which normally has a tendency to detune RFID antennas) and can be used indoors or outside.
Nearfield & Dual Polarity Solutions
The Nearfield Loop Design offers maximum power density in close proximity to the antenna. Mounting options include wall mount or tape mount. Dual Polarity antennas provides the smallest footprint possible for the gain; they are a great selection when space is at a premium. They offer efficient coverage on applications such as conveyor belts.

Custom Designed Solutions
Mobile Mark designs antennas for unusual settings. The Fork Lift setting provides ample challenges for antenna design; the all-metal siding blocks efficient signal transfer while not providing enough backing for a solid groundplane. Mobile Mark’s innovative PN7 Series antennas address these challenges to provide efficient coverage. Custom designed antennas can be converted to handheld use to scan the contents of a truck or container.
A well designed RFID antenna will provide optimal coverage, quicker registration of RFID tags and greater hit-rates for tag reading. Mobile Mark antennas will save RFID users time and money by providing more reliable and more accurate reporting.

If you need something special, Mobile Mark has the facilities and the experience to take a project from initial conception through to final production. Our team of design engineers brings years of experience and a proven track record for developing innovative, high quality antennas.


<table>
<thead>
<tr>
<th>COVERT INSTALLATION &amp; SMART SHELVING</th>
<th>NEARFIELD &amp; DUAL POLARITY</th>
<th>CP PATCH ANTENNAS FOR ALL DISTANCES</th>
<th>CUSTOM DESIGNS &amp; SPECIALTY APPLICATIONS</th>
<th>HEAVY DUTY &amp; HIGH VIBRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS Series Strip Patch Antenna</td>
<td>DLM &amp; DLT Series Dual-polarity Patch Wall mount or Tape mount RFID, 868 or 915 MHz 3 dBi gain (same profile for NLM Nearfield Loop)</td>
<td>PN8 Series Panel Antenna Mid-range coverage RFID, 868 or 915 MHz 8 dBi gain</td>
<td>HD7 Series Heavy-duty Panel Antenna RFID, 868 or 915 MHz 7 dBi gain</td>
<td></td>
</tr>
<tr>
<td>CVO Series Patch Antenna Impact resistant/Linear Pol. RFID, 868 or 915 MHz 2.5 dBi gain</td>
<td>PN6 Series Panel Antenna Left or Right hand Circularly Polarized RFID, 868 or 915 MHz 6 dBi gain</td>
<td>PN10 Series Panel Antenna shown with Back Plate Mounting Kit RFID, 868 or 915 MHz 10 dBi gain</td>
<td>HD7 Series Heavy-duty Panel Antenna shown with Pole Mount RFID, 868 or 915 MHz 7 dBi gain</td>
<td></td>
</tr>
<tr>
<td>CVL Series Embedded Custom enclosures RFID, 868 or 915 MHz 2 dBi gain</td>
<td>PN7 Series Fork-lift Panel Antenna Direct-N or Pigtail termination RFID, 868 or 915 MHz 7 dBi gain</td>
<td>PN7 Series Fork-lift Panel Antenna shown with Back Plate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>