Antenna Solutions

Transportation
Automotive Applications

**Embedded Solutions**
- Mirrors, OBD
- Heating system
- Navigation, Dashboard
- Door locking system
- Hotspot, Dual Sim
- Smart Tire, Breaks
- Radars, Wireless charger
- KeyFob, Tracking
- Video transmission (camera modules)
- Sensors, Ecall, Charge port release

**External Solutions**
- Cellular Connectivity
- Satellite radio, DVB
- Fleet Monitoring
- V2X, DSRC
- LMR
- Parking Assistance
- Shark fin type
- Cable assemblies
- SDARS, GNSS, Iridium

**Charging Stations**
- Geolocation
- Smart grid communication
- Cellular communication
- NFC
- Anti Vandalism
Embedded Solutions

- On-board solutions – Anything soldered on the PCB
  - In Vehicle
    - Anything on PCB
  - Accessories
    - Key Fob, detachable tablet, Remote control, OBD, Ecall, Tracking device
- Internal solutions – Anything deported from the main PCB
  - Mirrors, bumpers, engine, seats, dashboard, pillar
Ruggedized and Customized Multi-Band Automotive Solutions

<table>
<thead>
<tr>
<th>Family</th>
<th>Panther (GPSMB5)</th>
<th>Jaguar (GPSLPMB4)</th>
<th>Armadillo (GPSCP)</th>
<th>Razorback (RAZ)</th>
<th>Fin (GPSDM)</th>
<th>Disc (W4165)</th>
</tr>
</thead>
</table>

Frequencies Available: GPS, GNSS, LTE (MiMo), WiFi (MiMo or dual-band), ISM

Customize to Your Needs!
- Choose Family Type
- Choose Frequencies
- Choose Cable Lengths
- Choose Connectors

ICEFIN

LPT – Low Profile Series

Downloaded from Arrow.com.
New Flex Family
Automotive Antennas

WiFIVE Family

W3917: Dual band WiFi (cable at the tip)
W3918: Dual band WiFi (cable in middle)
W3919: 5GHz on FR4 type
W3920: 5GHz on FPC type
W3921: 2.4GHz FPC

W3915B0100 - Dual ISM/GPS
W3906B0100 – LTE Primary plus GNSS
W3907B0100 – LTE Diversity Only
W3908B0100 – GNSS only antenna

Gemini Family

W6103B0100 - 3x3 MIMO WIFI dual band
W6102B0100 - 2x2 MIMO WIFI dual band
W6112B0100 - 2x2 MIMO LTE
W6113B0100 - 2x2 MIMO LTE (global) with GNSS
Automotive GPS and Multiband Solutions

- Discrete Stealth Blade Solutions
  - Window, visor or other discrete mounting
  - Fakra connector
  - Various frequencies available – LTE, WiFi, GPS, ISM
    - Part #’s - SB698 (LTE), SB2400 (WiFi), SB900 (900MHz), SB800 (800MHz)
    - Part #GPSSB800/2170FS (GPS and ISM)
- Ceramic Antennas – search product list. Many frequencies/multi-bands
  - GPS (W3000), GNSS (W3010), GNSS/WiFi (W3095), WiFi (W3006) and more
- SMALLEST 2.4GHz antenna
  - 2x1x0.5mm, Part #W3092
- GPS, GLONASS PATCH
  - 25x25x4mm, Pin feed: Part #W3223
- GPS PATCHES
  - 18x18x4mm, SMT, Part #W3224
  - 25x25x4mm, SMT, Part #W3225
# V2X Type of Antennas

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chips:</td>
<td>W3006, W3078, W3095</td>
</tr>
<tr>
<td>PCB antenna:</td>
<td>W3315B0100, W3593B0100</td>
</tr>
<tr>
<td>WIFI:</td>
<td>W1043, W1028B, SPDA17RP2400/5900</td>
</tr>
<tr>
<td>Public Safety:</td>
<td>EF4905NMO, NMO4E5350B,</td>
</tr>
<tr>
<td>Antenna Combo:</td>
<td>GPSMB501</td>
</tr>
<tr>
<td>Shark fin:</td>
<td>GPSDM700/2500FFS</td>
</tr>
<tr>
<td>Outdoor Vehicle:</td>
<td>SLPT4900NMOHF, SLPT2400/5900NMOHF, SLPT4900DMN</td>
</tr>
<tr>
<td>Outdoor Mount:</td>
<td>RO4910NF, RO4910NM, RO5805NF, RO5805N, RO5806NF, RO5810NF, W5030, RO5810NM</td>
</tr>
</tbody>
</table>
After Market Key FOB

Pulse can assist to design magnetic or electric embedded solutions and study body loading, matching impact!

315MHz Coil W3126

433MHz Coil W3127

UWB Solution based on ceramic antenna 3.2 x 1.6 x 1.1mm³, Er 37.

Downloaded from Arrow.com.
Mirror Antennas – W6100 & W6101 in Side Mirror

W6100

Cable RG316 550mm
Fakra Conn: SMBA Code D
Antenna Size: 105x25x0.2mm

W6101

Cable RG316 550mm
Fakra Conn: SMBA Code D
Antenna Size: 105x25x0.2mm