Combo External Antennas (4G/Wi-Fi/GPS)

Fully balanced, IP66-rated antenna offers high 4G, Wi-Fi and GPS signal performance in telematics, remote monitoring and other applications

Features and Advantages

Compact, waterproof 3-in-1 External Antenna (Diameter: 77.00mm; Height: 15.00mm)
Enables space-efficiency and easy integration into applications requiring IP66 protection

Self-adhesive tape
Tape liner

Compact, waterproof 2-in-1 External Antenna (Diameter: 77mm; Height: 15mm)
Enables space-efficiency and easy integration into applications requiring IP66 protection

Flip-side of antenna housing

3.0m cables
Extend connectivity between the antenna and the application’s 2 radio devices for their respective 4G and GPS/BD operations

Compact, waterproof 2-in-1 External Antenna (Diameter: 77mm; Height: 15mm)
Enables space-efficiency and easy integration into applications requiring IP66 protection

3.0m cables
Extend connectivity between the antenna and the application’s 2 radio devices for their respective 4G and GPS/BD operations

Cable Connectors
Allow customization with other connectors including SMA, MMCX and more

FAKRA Connectors
(Blue: GPS/BD, FAKRA Model C; Purple: 4G, FAKRA Model D)
Positions and fixes the antenna to the PCB (via soldering); provides electrical contact between antenna and board

Applications

Automotive and Commercial Vehicles
Remote monitoring
Navigation devices
Fleet management systems that require high-speed data requirements

Automotive
Fleet Management Systems for Commercial Vehicles
**Combo External Antennas (4G/Wi-Fi/GPS)**

### Specifications

**REFERENCE INFORMATION**
- Packaging: Box
- Use With: FAKRA connectors (Model C/D/E) for series 206866 and (Model C/D) for series 211297
- Designed In: Millimeters
- RoHS: Yes
- Halogen Free: Yes
- Glow Wire Compliant: No

**ELECTRICAL (GPS ANTENNA)**
- Frequency Range: 1,575.42±1.023 MHz for series 206866 and 1561.098±2.046 MHz, 1,575.42±1.023 MHz for series 211297
- Average Total Efficiency: 26.2% for series 206866 and 22.3% (1561.098±2.046 MHz), 22.1% (1,575.42±1.023 MHz) for series 211297
- Peak Gain: 3dBi based on 70 by 70mm ground plane (206866) and -2.1dBi based on 70 by 70mm ground plane (211297)
- Polarization: RHCP

**ELECTRICAL (GPS LNA)**
- Frequency Range: 1,575.42±1.023 MHz
- DC Voltage: 3 to 5V (206866) and 3V (211297)
- DC Current: 11±3mA (at 3.3V)
- Noise Figure: ≤1.5 dB
- Gain: 28±3 dB (206866) and 25±3 dB (211297)

**ELECTRICAL (4G ANTENNA)**
- Frequency Range: 824 to 960 MHz, 1.71 to 2.60 GHz for series 206866 and 211297
- Average Total Efficiency: 21.6% (824 to 960 MHz), 27.2% (1.71 to 2.60 GHz) for series 206866 and 33.6% (824 to 960 MHz), 26.8% (1.71 to 2.60 GHz) for series 211297
- Peak Gain: -0.5 dBi type (824 to 960 MHz), 0 dBi type (1.71 to 2.60 GHz) for series 206866 and -0.8dBi type (824 to 960 MHz), 0.4 dBi type (1.71 to 2.60 GHz) for series 211297
- Polarization: Linear

**ELECTRICAL (WI-FI AND BLUETOOTH ANTENNA) (206866)**
- Frequency Range: 2.4 to 2.5 GHz
- Average Total Efficiency: 23.3%
- Peak Gain: -2.7 dB
- Polarization: Linear

**MECHANICAL**
- Pull Force: ≥15N

**PHYSICAL**
- Housing: ABS
- IP Rating: IP66
- PCB: FR4
- Shielding Case: Tin plate
- Cable: RG174
- Adhesive: 3M
- Operating Temperature: -40 to +85°C

### Ordering Information

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Operating Frequencies</th>
<th>Cable Length</th>
<th>Cable Connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>206866</td>
<td>GPS:1,575.42±1.023 MHz&lt;br&gt;40.824 to 960 MHz, 1.71 to 2.60 GHz&lt;br&gt;Wi-Fi: 2.4 to 2.5 GHz</td>
<td>3.0m</td>
<td>FAKRA (Model C/D/E)</td>
</tr>
<tr>
<td>211297</td>
<td>GPS: 1561.098±2.046 MHz&lt;br&gt;1,575.42±1.023 MHz&lt;br&gt;40.824 to 960 MHz&lt;br&gt;1.71 to 2.60 GHz</td>
<td>3.0m</td>
<td>FAKRA (Model C/D)</td>
</tr>
</tbody>
</table>

**Custom Product**
- Contact Molex

[Cable Connectors](www.molex.com/link/external_antennas.html)

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