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



Enables space-efficiency and easy integration into applications requiring IP66 protection



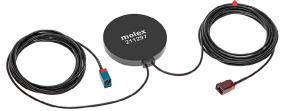
Flip-side of antenna housing

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



3.0m cables

Extend connectivity between the antenna and the application's 3 radio devices for their respective 4G, Wi-Fi and GPS operations

Cable connectors

Allow customization with other connectors including SMA, MMCX and more

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







FAKRA Connectors (Blue: GPS, FAKRA Model C; Purple: 4G, FAKRA Model D; Green: Wi-Fi, FAKRA Model E)

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

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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 dBi 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

Series No.	Operating Frequencies	Cable Length	Cable Connectors
206866	GPS:1575.42 ± 1.023 MHz 4G:824 to 960 MHz, 1.71 to 2.60 GHz Wi-Fi: 2.4 to 2.5 GHz	3.0m	FAKRA (Model C/D/E)
211297	GPS: 1561.098±2.046 MHz 1575.42 ± 1.023 MHz 4G:824 to 960 MHz 1.71 to 2.60 GHz	3.0m	FAKRA (Model C/D)

Custom Product	Cable Connectors
Contact Molex	SMA, MMCX and others