



# MULTI FUNCTION MIMO ANTENNA

# **Multi Function MiMo Antenna**

Plug&play MiMo Cellular Antenna for onboard Rail applications.

Multi-service MiMo Antenna delivers connectivity for GSM (up to LTE), global positioning (compatible with GNSS, Glonass, Galileo, and Beidou standards) and Wi-Fi connectivity in a robust housing. Designed for outdoor use, the antenna is compliant to IP66 and even protects against washing system water jets. It also withstands direct sunlight.

## **BENEFIT STATEMENTS**

- The up to 3x3 MiMo (Multiple in Multiple out) Antenna functionality enhances signal reception and throughput.
- Integration of Cellular, Wi-Fi and GNSS into one antenna enables single hole mounting while preserving the vehicles resale value.
- The compact shark fin style housing reduces aerodynamic drag and reduces energy consumption.

#### **APPLICATIONS**

- Cars
- Trucks
- Generators
- Pumps
- Emergency vehicles

## **KEY FEATURES**

- Compact shark fin housing
- 2x2 MiMo GSM function
- GNSS/Glonass/Galileo/Beidou function
- 2x2 or 3x3 Wi-Fi Antenna
- Groundplane-independent
- Single hole mounting
- IP66

# ELECTRICAL SPECIFICATIONS

- Frequency Range (MHz):
  - 698-960 / 1710-2170 / 2500-3800 (2G,3G,4G)
  - 1562-1612 (GNSS/Galileo/Beidou)
  - 2300-2500, 4900-6000 (WLAN)
- Peak Gain (Excluding cable loss):
  - Elements 2&3 2dBi (598-960MHz), 5dBi (1710-3800MHz)
    Elements 4,5,6 4dBi (2.4GHz), 6dBi (5.8GHz)
- Isolation with 5m CS29: Cellular >12dBi, WiFi >20dB
- Typicall efficiency w/o cable loss: elements 2&3: >50%
- Correlation co-efficient: Elements 2&3: <0.2
- Polarisation: Vertical (Element 6 is Horizontal)
- Pattern: Omni Directional
- Impedance:  $50\Omega$
- Max Input Power: 25W

## MECHANICAL SPECIFICATIONS

- Dimensions: Height-50mm (2.2"), Length-170mm (6.77"), Width-60mm (2.4")
- Operating Temp: -40°C to +80°C (-40° to 176°F)
- Approx Weight 260g

## MATERIALS SPECIFICATIONS

• ASA, EPDM, Aluminium Alloy Black

## ENVIRONMENTAL SPECIFICATIONS

• IP66

#### PARTS LIST

#### **BU information**

Part Number	Description
2332157-1	Multi Function MiMo Antenna 2G/3G/4G
2332157-2	Multi Function MiMo Antenna 2G/3G/4G+GNSS
2332157-3	Multi Function MiMo Antenna 2G/3G/4G+GNSS+2x2WiFi
2332157-4	Multi Function MiMo Antenna 2G/3G/4G+GNSS+3x3WiFi

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