

## INTRODUCING

# EMERGENCY SERVICE MIMO ANTENNA

- Support 2x2 MiMo LTE Antenna, 1x GPS, 2x2 MiMo Wi-Fi and VHF/UHF (TETRA) applications through optional whip
- Reduce vehicle damage, installation time and cost with only a single hole mount required for the antenna



TE Connectivity (TE) introduces a one size fits all, shark fin style solution for MiMo Wi-Fi and GPS applications requiring VHF or UHF capability. The emergency service antenna has a compact OEM style shark fin housing that contains 2x2 MiMo antenna function for 4G/3G/2G and an active antenna for GPS/GLONASS/Galileo/Beidou with 26dB gain LNA. In addition there is an integral stud mount for an external antenna whip that can support a range of VHF, UHF or 700/800MHz antennas. A blanking cover is supplied for when an external whip is not required. The emergency service shark fin style design provides multiple antenna functions while remaining discrete and is suitable for public safety (overt/covert), industrial and transport applications where a cost effective, efficient and robust antenna is essential. Requiring only a single hole mounting, this antenna reduces vehicle damage, installation time, cost and visual impact while protecting a vehicle's resale value.

## BENEFITS

- Support 2x2 MiMo LTE Antenna, 1x GPS, 2x2 MiMo Wi-Fi and VHF/UHF (TETRA) applications through optional whip
- Reduce vehicle damage, installation time and cost with only a single hole mount required for the antenna
- Support 6 operational bands including the TETRA emergency bands
- Achieve a suitable yet discrete application for public safety with the antenna's shark fin style design

## APPLICATIONS

- Public transportation
- Trains
- Subway carriages
- Public safety camera systems
- Industrial

## STANDARDS & SPECIFICATIONS

- IP rating (IP66)
- UN118.01

## MECHANICAL

- Dimensions (mm)
  - Height (Excluding whip): 50mm (2.2")
  - Length: 17mm (6.77")
  - Width: 60mm (2.4")
- Operating temp: -40°C to 80°C (-40°F to 176°F)
- Color: Black
- Typical Weight (g):
  - PN1-2823602-2: 240
  - PN1-2823602-1: 260

## MATERIALS

- ASA, EPDM, Aluminum Alloy

## ELECTRICAL

- Frequency range (MHz):
  - Element 1: 2562-1612
  - Element 2 & 3: 698-960, 1710-2170, 2500-3800
  - Elements 4 & 5 (PN1-2823602-1 only): 2300-2500 & 4900-6000
  - Whip: Dependent on selected whip
- Operational Bands
  - Element 1: GPS/GNSS/Galileo/Beidou
  - Elements 2 & 3: 4G/3G/2G
  - Elements 4 & 5 (PN1-2823602-1 Only): 2.4GHz WLAN/ Public Safety
  - 4.9GHz/5.8GHz WiFi
  - Whip: Dependent on selected whip
- Peak gain: Isotropic\*
  - Elements 2 & 3: 2dBI (698-960MHz) 5dBI (1710-3800MHz)
  - Elements 3 & 4 (PN1-2823602-1 Only): 4dBI (2.4GHz), 6dBI (5.8GHz)
- Isolation (with 5m (16') CS29):
  - Cellular: >12dB
  - WiFi: >20dB
- Typical Efficiency\* w/o cable loss:
  - Elements 2 & 3: >50%
- Correlation Co-efficient:
- Elements 2 & 3: <0.2
- Polarization: Vertical
- Pattern: Omni-directional
- Impedance: 50Ω
- Max Input Power: Internal elements 25W/main whip 60W

## LEARN MORE

[Antenna Overview Page](#)  
[Flyer](#)  
[Part Numbers](#)

