

## Patriot Series

## **ABOUT THE SERIES**

# **Taoglas Patriot Series**

The **Patriot Series** are cutting-edge, multi-combination antennas engineered specifically for the Ford Interceptor vehicle, the most widely used police vehicle in the U.S.A. Designed to eliminate the need for multiple antennas, it offers up to 18-in-1 connectivity, including 5G,/4G, GNSS (L1 & L1/L5), Wi-Fi<sup>\*</sup>, SDARS and LMR/TETRA, ensuring optimal performance for first responders and fleet vehicles. It is compact, low-profile design allows for seamless integration onto vehicle roofs, utilizing existing OEM mounting connections to simplify installation.

The Patriot Series guarantees enhanced signal strength and with its rugged IP67-rated enclosure and ability to mount behind the roof ribs, this next-generation antenna delivers superior durability, reliability, and efficiency, making it one of the most versatile and compact solutions available today. With a small footprint of (L)205 mm x (W)180 mm x (H) 60 mm (whip height of up to 164 mm but can vary depending on frequency required), the compact design ensures a low-profile, unobtrusive installation.

Why Choose Patriot Antennas?

- Designed for Law Enforcement & First Responder Vehicles: Specifically built for the Ford Interceptor Vehicle, the compact and rugged design of the Patriot Series fits within strict height restrictions and meets first responder vehicle requirements.
- Unique Multi-Function Antenna Integration: Supports 2x multi-band GNSS for precise • tracking and offers up to 18-in-1 connectivity options, including 5G, 4G, GNSS, and Wi-Fi<sup>°</sup>, eliminating the need for antenna farms on the roof.
- Superior Installation and Integration: Utilizes the existing OEM antenna mounting hole and includes a customised foam gasket for a seamless, secure, interference-free installation between roof ribs. Full installation guide here.
- Outstanding Design: Enhancing aesthetics and reducing wind resistance, with an IK08 and IP69K-rated waterproof enclosure, proving to be one of the most compact and versatile combination antennas in its category.



**Series Information** 

**Key Specifications** 

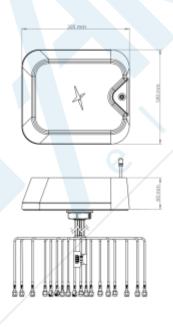
| Antennas: | 5G/4G cellular – 600-6000 MHz        |
|-----------|--------------------------------------|
|           | Wi-Fi <sup>®</sup> - 2.4/5.8/7.1 GHz |
|           | GNSS – Multiband L1/L5               |
|           | SDARS – 2.3 GHz                      |
|           | LMR – 380-400 MHz, 700-900 MHz       |

| Dimensions: | Height | Length | Width  |
|-------------|--------|--------|--------|
|             | 60mm   | 205 mm | 180 mm |
|             | 2.36"  | 8.07"  | 7.09"  |

Cables\*: GNSS RG-174, Wi-Fi/cellular TGC-1.5DS

Connectors\*: SMA(M) and RP-SMA(M) for Wi-Fi

\*Cables and connectors are fully customisable upon request



#### **Product Configuration**

Several configurations in both black and white are available as standard, see below.

• **PATR.SP.18.B.0.3M** - Black Patriot with 2x GNSS, 9x cellular MIMO, 5x Wi-Fi MINO, 1x SDARS, and 1x LMR Whip

• PATR.SP.18.W.0.3M - White Patriot with 2x GNSS, 9x cellular MIMO, 5x Wi-Fi MINO, 1x SDARS, and 1x LMR Whip

• PATR.SP.17.B.0.3M - Black Patriot with 2x GNSS, 9x cellular MIMO, 5x Wi-Fi MINO, and 1x SDARS

• PATR.SP.17.W.0.3M - White Patriot x GNSS, 9x cellular MIMO, 5x Wi-Fi MINO, and 1x SDARS

Other configurations are available upon request, contact your local Taoglas customer service team for more information.



#### Integration

Proper installation of the Patriot series antenna is essential to maintain the waterproof integrity of the vehicle or enclosure and to ensure optimal performance across all antenna elements.

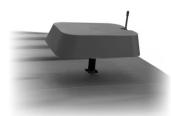
Typical Integration Steps:

1. **Mounting Location**: The Patriot antenna is secured via a 22 mm diameter threaded mounting stud. In many cases, it can be installed in the vehicle's existing OEM antenna location. If this is not available, a 24 mm hole will need to be drilled in the roof or enclosure.

2. **Surface Preparation**: Clean and dry the mounting surface thoroughly to ensure a secure seal. Route the cables through the hole.

3. **Antenna Placement**: Remove the 3M adhesive backing from the base of the antenna. Position the antenna in the desired orientation and press firmly into place.

4. **Securing the Antenna**: From inside the vehicle or enclosure, slide the washer and nut over the cable bundle and tighten to secure the antenna firmly to the roof.



#### Features

- All-in-one combination antenna
- Cellular MIMO Antenna
- Dual-band Wi-Fi® MIMO Antenna
- Supports two GNSS Antenna
- IK08 and IP69K rated, robust external housing

## **Benefits**

- Design specifically for First Responder Vehicles
- The most compact all-in-one combination antenna solution
- Eliminating the need for vehicle roof antenna farm for next-gen connectivity
- Customization of connectivity combinations and cable modifications available to meet the user's needs
- Rugged, waterproof, low-profile design

#### **Typical Applications**

- Law Enforcement
- Emergency and First Responder Vehicles
- Smart Cities
- Smart Industry
- Transportation

